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Aquitanian Notation in Iberia: Plainchant Fragments in Braga and Guimarães (11th–15th century)*

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Solange Corbin was the first scholar to observe that a lozenged punctum was used to mark the lower note of the diatonic semitone (E, B natural, or A with flattened B) in around thirty Portuguese fragments and codices, mainly dated between the thirteenth and fifteenth centuries. When the lozenged punctum carries this specific function as a semitone-marking sign, it is commonly referred to in the scholarly literature as a “special punctum.”¹ Corbin regarded the lozenge indicating the lower note of the semitone as the main characteristic of “Portuguese notation” which derived from the Aquitanian notation and was used in Portuguese manuscripts from the last quarter of the twelfth century up to the fifteenth century.² Even though Corbin’s findings were later revised by herself and other scholars, the special punctum is still regarded as a graphical feature mostly peculiar to Portuguese manuscripts.³

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1. The term “special punctum” is drawn from Colette’s expression “*forme spéciale de point*” used to indicate one of the three signs used to signal the lower note of the semitone in F-Pn, ms. lat. 1139. Marie-Noël Colette, “La notation du demi-ton dans le manuscrit Paris, B. N. Lat. 1139 et dans quelques manuscrits du Sud de la France,” in *La tradizione dei tropi liturgici. Atti dei convegni sui tropi liturgici, Parigi (15–19 ottobre 1985) – Perugia (2–5 settembre 1987)*, ed. Claudio Leonardi and Enrico Menestò, Spoleto: Centro Italiano di Studi sull’Alto Medioevo, 1990, pp. 297–311. However, the presence of a lozenged punctum does not necessarily signify a semitone and so comply with the modern definition of “special punctum.” In fact, it is important to check not only the occurrence and location of the lozenge but also the *finalis* of the piece.
 2. Solange Corbin, *Essai sur la musique religieuse portugaise au Moyen Âge (1100–1385)*, Paris: Les Belles Lettres, 1952, pp. 251–58.
 3. “The continued use beyond the 12th century of the semitonal punctum in Aquitanian notation appears most prominent among Portuguese sources and so the use of the description

This palaeographical study investigates the characteristics of Aquitanian notation and the use of the lozenged (or, more rarely, tilted) punctum as a mi-sign in the plainchant fragments in Aquitanian notation currently kept in the archives of Braga and Guimarães, in Northern Portugal. Broadly speaking there is an incomplete understanding of the diffusion and transmission of plainchant in Portugal in the aftermath of the imposition of the Franco-Roman chant (in the late eleventh century) and over the following centuries. Likewise, we have yet to fully understand the peculiarities of the notation and find out if any scribal idiosyncrasies developed locally. The two neighboring cities of Braga and Guimarães have been selected for this research on the notation of plainchant as their archives contain a great number of *membra disiecta*, most of which are studied here for the first time. Compared to the rest of Portugal, both Braga and Guimarães are in a pretty favourable position for the study of medieval liturgical musical sources. Indeed, the diocese of Braga played an important role in the diffusion of the new Franco-Roman rite at the end of the eleventh century and nowadays there exists an extended bibliography on its liturgy and some of the sources associated with the rite in Braga. Similarly, a recently published catalogue on Guimarães allows us to better appreciate the peculiarity of some of its medieval liturgical music sources.⁴ The 104 fragments studied here date from the twelfth to the fifteenth centuries (the fragments are listed in Appendix 1). I do not assume here that all the fragments now in Braga and Guimarães have Portuguese origins, however, many of them are unequivocally related to the liturgy of Braga which strongly suggests a local production.⁵ This research aims to contribute to a better and broader understanding of the characteristics of Aquitanian notation by describing if and how semitone information was conveyed in the fragments,⁶ discussing the diastemata of the notation in relation to the age of the sources, and describing other elements that can shed light on the transmission and diffusion of plainchant in the Peninsula. However, it is important to highlight that

‘Portuguese’ remains justified especially for later uses of such notation,” Kathleen E. Nelson, “The Notated Exultet in Braga’s *Missal de Mateus*: Known Tradition or New Composition?,” in *Musical Exchanges 1100–1650. Iberian connections*, ed. Manuel Pedro Ferreira, Kassel: Reichenberger, 2016, pp. 31–48, here pp. 38–39. See also Kathleen E. Nelson, “Observations on an Early Twelfth-Century Antiphoner Fragment at Toledo,” *Inter-American Music Review*, 17/1–2, 2007, ed. Robert Stevenson and Emilio Rey Garcia, *Concordis Modulationis Ordo Ismael Fernández de la Cuesta In Honorem*, pp. 17–24, here p. 23.

4. *Harmonias do céu e da terra. A música nos manuscritos de Guimarães (séculos XII–XVII). Harmonies of Heaven and Earth. The music in the manuscripts of Guimarães (12th–17th centuries)*, ed. Manuel Pedro Ferreira, Guimarães: Museu de Alberto Sampaio, 2012.
5. The origin of the fragments is discussed in §1. Plainchant fragments in Braga and Guimarães.
6. This research not only investigated the usual conventions of Aquitanian notation but also inquired into the possibility that any notator applied his/her own creative method for indicating the semitone.

plainchant in Iberia was also occasionally notated in square notation. Indeed, Aquitanian and square notations coexisted in the Peninsula for a few centuries, but Aquitanian notation was much more largely diffused compared to the square one. Eventually, it was only in the fifteenth century that square notation superseded Aquitanian notation and it is only in the last third of the sixteenth century that Aquitanian notation was definitively abandoned.⁷

Studying the fragments in Braga and Guimarães reveals some aspects of the history of Aquitanian notation that cannot be discerned by studying manuscripts written in Southern France. Iberian sources allow us to explore how a foreign notational system (Aquitanian notation) was adopted in the Peninsula in the aftermath of the imposition of the Franco-Roman liturgy at the end of the eleventh century. Did Visigothic scribes creatively assimilate and rework elements of the Aquitanian notation? Or did they passively accept the foreign model? What happened as time passed and the Iberian scribes mastered the new notation? Can we recognise in early and later Iberian sources any diversity or uniformity of practices in Aquitanian notation? By attempting to answer these questions, this research draws on new evidence of how Aquitanian notation was adapted and spread in the Iberian Peninsula. Additionally, the analysis of Iberian sources allows us to investigate the graphical changes that occurred in Aquitanian notation over a time span of four centuries (from the late eleventh to the late fifteenth century). Indeed, while in Southern France Aquitanian notation had already begun to be replaced by square notation in the twelfth century, Aquitanian notation remained the main system for music writing in the Peninsula until at least the early fifteenth century, and it was still being used in the sixteenth century. During the five centuries when Aquitanian notation remained in use in the Peninsula, its graphical appearance gradually changed due to the presence of new writing tools for Gothic script, namely some much broader nibs.⁸

7. Corbin, *Essai sur la musique religieuse portugaise*, p. 248. Manuel Pedro Ferreira, “Notation and Psalmody: A Southwestern Connection?,” in *Cantus Planus. Papers Read at the 12th Meeting of the IMS Study Group, Lilla-fired/Hungary, 2004. Aug. 23–28*, ed. László Dobszay, Budapest: Hungarian Academy of Sciences, 2006, pp. 621–39, here p. 623. Manuel Joaquim, *Nótulas sobre a música na Sé de Viseu*, Viseu: Junta de Província da Beira Alta, 1944, pp. 70–71. Alvarenga briefly discussed some of the changes that occurred to the appearance of Aquitanian neumes in Portuguese manuscripts and interpreted them as a consequence of the stylistic changes that occurred during the transition from Carolingian to Gothic script: João Pedro d’Alvarenga, “Breves notas sobre a representação do meio-tom nos manuscritos litúrgicos medievais portugueses, ou o mito da ‘notação portuguesa’,” in *Medieval Sacred Chant from Japan to Portugal*, ed. Manuel Pedro Ferreira, Lisbon: Edições Colibri, CESEM, 2008, pp. 203–19, here p. 210.
8. The main reference for later modifications of Aquitanian notation are the comments made by Stäblein who described three classes of notation: a) almost unchanged with the exception of the squaring of the punctum; b) modified Aquitanian notation of two styles, Northern and Southern (the latter being found especially on the Iberian Peninsula); c) square notation with traces of Aquitanian notation. Bruno Stäblein, *Schriftbild der einstimmigen Musik*, Leipzig:

The narrow nib, typical of the early days of Aquitanian notation, allowed each graph to be shaped very clearly and also permitted a great deal of control over the individual pen-strokes. Indeed, in the early sources the puncta were “written,” that is, traced with a single pen-stroke (Fig. 1), whereas in later sources the square puncta were “drawn,” that is, the scribe first drew the four edges and then filled them with ink (Fig. 2).⁹ An indirect proof that Aquitanian notation continued to serve as a model for manuscript copy until the sixteenth century comes from some Spanish treatises dated to the fifteenth and early sixteenth centuries that discuss, among other things, the single-line plainchant notation.¹⁰

The first part of this article gives an overview of the fragments now kept in Braga and Guimarães as I consider their material conditions, origins, and liturgical contents. This is followed by a presentation of the different systems for marking the mode and the semitone in Aquitanian notation which were employed in France and Iberian territories. Subsequently, I examine the dissemination of the lozenged punctum and its use as semitone marker in the fragments that are the object of this investigation and, finally, I discuss the graphical changes and continuities in function and appearance observed in the notation of the fragments between the twelfth and the fifteenth century. The conclusion wraps up the discussion with some final remarks on the notation of the plainchant fragments in Braga and Guimarães.

Plainchant fragments in Braga and Guimarães

No complete Portuguese liturgical manuscript dated before the twelfth century survives.¹¹ However, the archives of Braga and Guimarães contain 104 liturgical fragments in Aquitanian notation and I have been able to study many of them for the first time.¹² The incomplete state of these sources forced me to focus in

Deutscher Verlag für Musik, 1975, quoted from Kathleen E. Nelson, *Medieval Liturgical Music of Zamora*, Ottawa: Institute of Mediaeval Music, 1996, pp. 79–80.

9. Carmen Rodríguez Suso, *La monodia litúrgica en el País Vasco. Fragmentos con notación musical de los siglos XII al XVIII*, Bilbao: Bilbao Bizkaia Kutxa, 1993, p. 493.
10. Nelson, *Medieval Liturgical Music*, pp. 41–75.
11. Maria José Azevedo Santos, “Paleographic tendencies in 10th–12th century notated liturgical fragments from Portugal,” in *Hispania Vetus. Musical-liturgical Manuscripts from Visigothic Origins to the Franco-Roman Transition (9th–12th Centuries)*, ed. Susana Zapke, Bilbao: Fundación BBVA, 2007, pp. 113–25, here p. 113.
12. Fragments P-G, P 1, P 610, and P 782 have been excluded from this analysis because of their poor material condition. A brief survey on some fragments in Braga can be found in Joaquim Félix de Carvalho, “Fragmentos litúrgicos de Braga,” *Didaskalia*, 40/2, 2010, pp. 93–111. See also Manuel Pedro Ferreira, “A música na Sé de Braga durante a Idade Média: Estado da questão,” in *A Catedral de Braga. Arte, Liturgia e Música dos fins do século XI à época tridentina*, Lisbon: Arte das Musas, CESEM, 2009, pp. 93–135.

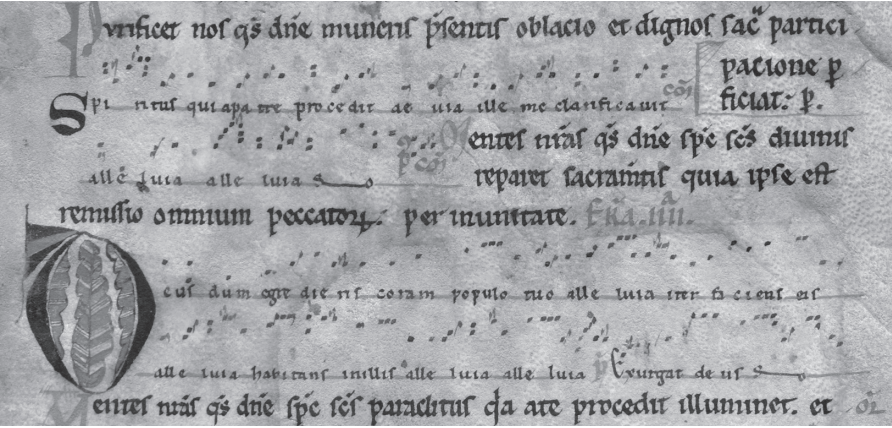


FIGURE 1 • P-BRAD, 8, fol. Ar (detail), example of early Aquitanian notation (12th century),
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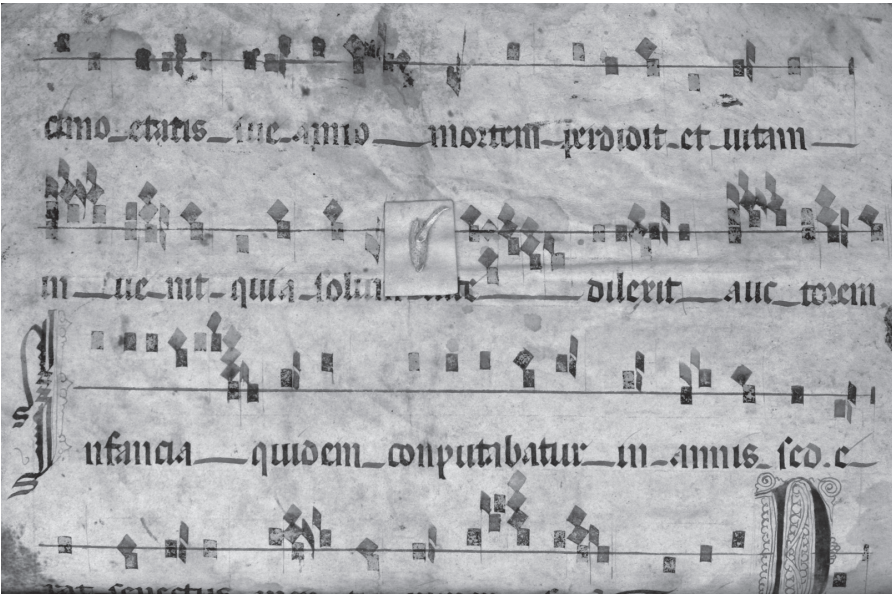


FIGURE 2 • P-BRs, 3, recto (detail), example of late Aquitanian notation (15th century)

the preliminary part of this research not only on the notation but also on the overall contents and the material conditions of the fragments, seeking any clues that could provide evidence about the fragments' origins. As part of this research, all the images, codicological descriptions, and Cantus indexes of the fragments were accessible in the "Portuguese Early Music Database" (PEM).¹³ Most of the fragments come from Mass books but there is also a fragment (P-BRad, 6) from a Breviary-Missal, a type of book that merged several liturgical books into one big volume, and which was usually prepared for newly founded religious institutions or institutions with few material resources.¹⁴ The fragments date from the early twelfth to the late fifteenth century (though 75 out of 101 fragments date from the twelfth and thirteenth centuries). The fragments often consist of a bifolio and they are generally in good condition. Many fragments were trimmed and used as binding material for administrative books dating from the sixteenth and seventeenth centuries. Thus, in most cases, one side of the fragment (the external cover) is difficult to read while the other (the internal cover) is much better preserved (see P-BRad, 208). Damage to the fragments includes trimming and holes made during the binding process. Signs of wear include tears, vanished ink, dirt, library stickers, etc. Occasionally, additions in a later hand are found on the fragments.¹⁵ Some fragments have been removed from the administrative book they covered (like P-BRam, N° 10 Códices) while others are still stitched to it (P-BRs, Frag. 1). One may argue that when in the sixteenth century the liturgical manuscripts in Aquitanian notation started to be replaced by new books in square notation, some folios from those old liturgical books—which had been locally used until recently and had now become useless—were recycled for binding purposes. The administrative books were originally kept in local archives ("*tombos*") before being moved to their current locations in Braga and Guimarães. In 33 out of 40 fragments now in the Archivo Distrital of Braga a later hand added some information about the *tombos* where the fragments were originally preserved as well as about the documents for which they were used as bindings. As can be seen in Table 1, all the references point to places located within a range of 100 km from Braga. This piece of evidence only proves that in the past few centuries the fragments

13. PEM (pemdatabase.eu) is a digital library that allows free and universal access to many Iberian (mostly Portuguese) manuscripts with musical notation written before c.1650.
14. Michel Huglo, *Les livres de Chant Liturgique*, Turnhout: Brepols, 1988, p. 127. See Appendix 2 for information on the book type of each fragment.
15. Occasionally the later additions identify the contents of the notarial book. For instance, the inscriptions on P-G, P 808 tell us that it was used as the cover of the "Livro Mixto" of Santa Maria in Silves (this notarial book lists all people born between 5th May 1566 and 22nd October 1613; and those married between 29th January 1565 and 11 July 1616). An interesting inscription in a later hand is found at the top of fol. Br in P-BRad, 81, it reads: "... Iheronimus ludovicus notarius me fecit."

have been kept within the area of Braga; however, it may be wrong to assume that also the original provenance of the fragments was within the same area.

TABLE 1 • List of the 33 fragments now in P-BRad with reference to the archive where they were originally kept

Shelf-mark	Provenance
s. n.	Salvador de Barbeita ¹⁶
1	Santa Maria de Gallegos
3	São Lourenço de Durrães
4	Santa Marinha de Geraz do Lima
6	São Tiago in Creixomil
8	São João de Gamil
9	São Tiago de Amorim
11	Salvador de Amares e São Paio de Besteiros
13	Vila Pouca de Aguiar
15	Santa Eulália de Balasar e Gondifelos
23	Santa Marinha de Lousado
24	São Mateus de Ribeira de Ome
25	Santa Maria de Abadim e Santo André das Taiais
28	Santa Marinha de Peruzello
46	Santa Eulália de Orvacém
48	Egreja de São Lourenço de Gabriel (?)
50	Salvador de Padreiro
52	São Tiago de Cerdedo
77	São Tiago de Antas
81	Salvador de Pedregais
85	Salvador de Vilarinho das Cambas
90	Salvador de Donim
91	Santa Maria Madalena dos Arcos
92	Santa Maria the Alvora
100	Santa Comba de Eiras
107	São Miguel de Perre
108	Santa Maria de Paredes
150	Salvador de Mouços (Vila Real)
169	Bente, São Salvador (Vila Nova de Famalicão)

16. São Salvador de Barbeita belonged to the bishopric of Tui, Spain. This fragment was kept in the “Pasta dos documentos visigóticos” before it disappeared.

172	Santa Maria de Covas, Barroso (Montalegre)
176	São Mamede de Bustelo
210	São Mamede de Lindoso
244	Santa Comba de Vila Fonche

Indeed the origins of the 101 fragments now in Braga and Guimarães need to be treated with great circumspection; if we analyse their contents, it becomes suddenly clear that they are not a coherent group. From a liturgical point of view the fragments show a complex net of interrelationships transmitted by local, Iberian or Aquitanian models from different traditions and different times.¹⁷ For instance, the fragments now in Braga are usually concordant with the liturgy of the cathedral of Braga (see P-BRad, 169; P-BRam, N° 8 Códices) but occasionally show some interesting differences indicating they are not exclusively of Northern Portuguese origin.¹⁸ A generic Iberian liturgical kinship can be illustrated by the following three examples. First, fragment P-G, N 46 contains the offertory verse “Benedictus es” (Cantus ID g01120a) which seems to be peculiar to Iberia—indeed, so far it has only been found in the Salamanca Missal and in another fragment from Guimarães, P-G, N 93. Second, P-G, N 37 is a non-central bifolio containing part of the office for “Briccii.” This office matches that for Bricci found in E-Tc, 44.2 (fol. 158 *sq.*). Moreover, the two responsories “Post excessum” (Cantus ID 601816) and “Sanctus Britius” (Cantus ID 602147) seem to be peculiar to the Iberian-Aquitanian repertory.¹⁹ The third example is P-G, N 60, a central bifolio containing two fragmentary offices without any rubric that could shed light on their liturgical setting. Chants for the first office (found on fol. A-Br) are usually associated with the Octave of Christmas but, unfortunately, none of the sources currently indexed in PEM, and more widely in Cantus Index, shares the same chants with the same liturgical order as fragment P-G, N 60. However, the closest similarity can be found with the chants

17. See the Cantus indexes of the fragments—prepared for this research—which are now available on PEM.
18. The books representative of the liturgy of Braga that I have used for comparison are: P-BRs, Ms. 32 (an early sixteenth-century Temporal Antiphoner in square notation); P-BRs, Ms. 28 (an early sixteenth-century Sanctoral Antiphoner in square notation); the “Breviarium Braccarense” P-Ln, INC. 94 (a breviary without music printed by João Gherlinc for Pedro de Barzena in 1492); P-BRs, Ms. 34 (a Gradual in square notation copied between 1510 and 1515). Details on the way that the music scribe of Ms. 34 translated into square notation quilismas, liquescences etc., are discussed in Manuel Pedro Ferreira, “Três fragmentos de Lamego,” in *Aspectos da Música Medieval no Ocidente Peninsular*, Lisbon: Imprensa Nacional Casa da Moeda / Fundação Calouste Gulbenkian, 2010, vol. 2, pp. 58–81, here p. 69.
19. According to the Cantus Index online catalogue and up to the present date, both responsories have been found only in the following Iberian-Aquitanian codices/fragments: E-Tc, 44.1 (fol. 138rv); E-Tc, 44.2 (fol. 158r); F-Pn, ms. lat. 1090 (fol. 229v); P-BRs, Ms. 28 (fols. 192v, 193v); and P-BRam, N° 12 Códices fol. Brv.

for the “Octava Nat[ivitatis] Domini” in E-Tc, 44.2. Furthermore, the Antiphon “O admirabile” (Cantus ID 003985) displays an interesting feature. Instead of starting with “O admirabile commercium”—as normally found—it starts with “O admirabile misterium.” According to the Cantus Database, this word replacement is found only in a few manuscripts representative of the Braga use and in one manuscript from Benevento.²⁰ The fragments representing the generic Aquitanian liturgical tradition include P-BRam, N° 12 Códices, P-G, C 623; P-G, N 38; and P-Gsc, 225. P-BRam, N° 12 Códices contains the Office for St. Gerald of Aurillac, which is found in few other Aquitanian-related sources.²¹ P-G, C 623 contains some old Hispanic and Gallican *Preces* which are commonly found in eleventh- to twelfth-century Aquitanian manuscripts.²² P-G, N 38 contains some liturgical feasts that clearly point to Aquitaine, such as “Lautenus” (abbot of Maximiac, found mainly in manuscripts from Cluny, 2 November), “Leonardus” (Leonard of Limoges, disciple of St Remigii, 6 November), “Florus Episcopus Lugdunensis” (bishop of Lyon, 4 November), “Austremonius” (first bishop of Clermont, 7 November).²³ Finally, the liturgical calendar of P-Gsc, 225 (28 August to 8 September, then 29 September to 14 October) coincides with that of Cluny. In conclusion, while it is likely that most of the fragments under consideration here were made within the area of the archdiocese of Braga, which included the nearby city of Guimarães, many other fragments do not generally display exclusively Portuguese traits in their script, nor do the chant texts include mention of exclusively Portuguese saints, or other useful localizing information, suggesting instead a more general Iberian origin.

Aquitanian notation from Southern France to Iberia

After the replacement of the local Old Hispanic liturgy with the Gregorian rite at the end of the eleventh century, several monks arrived in Iberia from Southern France, bringing along manuscripts to be used as models for the local production of new liturgical books.²⁴ The change of rite triggered a cultural and

20. See P-BRs, Ms. 32, fol. 75v (Feast: Octave of Christmas); Ms. 28, fol. 281v (Feast: Votive Office for Mary, after Epiphany) and fol. 290v (Feast: Cantica Canticorum, after Epiphany). I-BV, 19, fol. 41v.
21. F-Pn, ms. lat. 2826, ms. lat. 944, ms. lat. 776 and E-Tc, 44.2.
22. Michel Huglo, “Les *Preces* des graduels aquitains empruntées à la liturgie hispanique,” *Hispania Sacra*, 8, 1955, pp. 361–83.
23. See PEM. Further information on manuscripts containing the same liturgical feasts can be found in the database Calendoscope.
24. On the arrival of new manuscripts in Aquitanian notation in the Iberian Peninsula, see Michel Huglo, “La pénétration des manuscrits aquitains en Espagne,” *Revista de Musicología*, 8/2, 1985, pp. 249–56. Corbin, *Essai sur la musique religieuse portugaise*, pp. 75–125.

musical transformation which entailed, among other things, the replacement of both the Visigothic script and the Old Hispanic musical notation with, respectively, the Early Gothic script and the Aquitanian notation.²⁵ From the end of the eleventh century onward, Aquitanian notation became the means by which liturgical chant was written down in Iberia. With the aim to better understand the characteristics of the Aquitanian notation and, more specifically, the use of any mi-sign in the fragments now in Braga and Guimarães, I introduce in the following section the two elements of Aquitanian notation most closely related to diastemata: the key line and the semitone markers. The discussion below relies on some previous literature on the topic and it presents both elements in relation to their use in geographical areas where Aquitanian notation was employed. The fact that previous scholars focused mainly on the analysis of French sources is inevitably reflected in the overview presented below. Indeed, research on several aspects of Aquitanian notation in Iberian sources is still uncharted territory. Nevertheless, I deemed it useful to refer here to previous studies on the characteristics of Aquitanian notation in other geographical areas because it may help to give a clearer picture of Aquitanian notation and its diffusion in Portugal, as well as the presence of any local peculiarity.

The key-line

In Southern France in the eleventh century, Aquitanian neumes were placed around a dry-point line; during the twelfth century this line was written over in red ink. However, neither the red ink nor the line actually represent the semitone, but simply show the F or C line and thereby determine the position of the

25. Nowadays there is a partial understanding of the introduction of the Roman rite in Portugal, which has been studied only in some areas of the country. The main reference is José Mattoso, *O monaquismo ibérico e Cluny*, Lisbon: Círculo de leitores, 2002. “Monges e clérigos portadores da cultura francesa em Portugal (séculos XI e XII),” in *Les rapports culturels et littéraires entre le Portugal et la France. Actes du colloque, Paris 11–16 octobre 1982*, Paris: Centre culturel portugais; Lisbon: Fundação Calouste Gulbenkian, 1983, pp. 41–58. For the area of Braga essential references are the works of Pedro Romano Rocha, *L’office Divin au Moyen Âge dans l’Église de Braga. Originalité et dépendances d’une liturgie particulière au Moyen Âge*, Paris: Fundação Calouste Gulbenkian, Centro Cultural Português, 1980. “Les sources languedociennes du Bréviaire de Braga,” *Cahiers de Fanjeaux. Collection d’histoire religieuse du Languedoc au XIII^e et au début du XIV^e siècles*, 17, 1982, pp. 185–207. Manuel Pedro Ferreira, “As origens do Gradual de Braga,” *Didaskalia*, 25, 1995, pp. 57–96, expanded as “Das origens do Gradual de Braga,” in *Aspectos da Música Medieval no Ocidente Peninsular*, vol. 2, Lisbon: Imprensa Nacional Casa da Moeda, Fundação Calouste Gulbenkian, 2010, pp. 119–60. Ferreira, “A música na Sé de Braga,” Joaquim Oliveira Bragança, *Liturgia e espiritualidade na Idade Média*, Lisbon: Universidade Católica Editora, 2008. Juan Pablo Rubio Sadia has extensively published on the introduction of the Gregorian rite in Spain: see, among others, *La recepción del rito francorromano en Castilla (ss. XI–XII). Las tradiciones litúrgicas locales a través del Responsorial del Proprium de tempore*, Città del Vaticano: Libreria Editrice Vaticana, 2011.

semitone beneath it.²⁶ The single-line notation required little space on the page and, possibly, the main reason why the single-line notation was not replaced with the four- or five-line system when it became fashionable and almost universal elsewhere was a lack of resources: Iberian churches could not afford the production of new and expensive books and opted to maintain and re-use the old ones for as long as possible.²⁷ Manuscripts in Aquitanian notation broadly associated with Spain had a dry-point line in the eleventh century; in the following century they had either a dry-point or a red line but it is only in the thirteenth century that the sources with a coloured line outnumbered those in dry-point line; the line was generally red, but it could also be yellow, green, black or charcoal. There are very few fourteenth-century Spanish sources with a dry-point line and they are outnumbered by those with a red line; at this time the only other line colour was black (but this was used very infrequently).²⁸ A study on some later sources in Aquitanian notation in Zamora (Spain)—dating from probably the late thirteenth, fourteenth, and fifteenth centuries—demonstrated that those sources occasionally show a multi-lined staff and extra lines are often drawn with light ink in red or yellow.²⁹ In the Basque Country the line turned red in the thirteenth century but here, most of the manuscripts from this century still show a dry-point line. In the following centuries, Aquitanian notation was usually written around a red line but the dry-point line can be found as late as the sixteenth century.³⁰ In Portuguese manuscripts the dry-point line is found until the end of the eleventh century or the beginning of the twelfth; a yellow line is barely found in manuscripts dated to the first half of the thirteenth century; and a red line is found mostly from the thirteenth century onwards.³¹

In Aquitanian notation, the meaning of the line could change according to the mode of the piece. For a modern reader it is crucial to fully understand how

26. Michel Huglo, "The earliest developments in square notation: twelfth-century Aquitaine," in *The Calligraphy of Medieval Music*, ed. John Haines, Turnhout: Brepols, 2011, pp. 163–71, here p. 165.
27. Nelson, *Medieval Liturgical Music*, p. 58. Rodríguez Suso, *La monodia litúrgica*, p. 523. Carmen Rodríguez Suso, "La notación aquitana en el País Vasco (siglos XII–XVI)," *Revista de Musicología*, 4, 1993, pp. 2297–305, here p. 2304.
28. This information was gathered by Kathleen Nelson in her analysis of the manuscripts listed in the catalogue of sources from the Middle Ages located in Spanish libraries and sources of Spanish origin now in London and Paris (Ismael Fernández de la Cuesta, *Manuscritos y fuentes musicales en España. Edad Media*, Madrid: Editorial Alpuerto, 1980). Nelson, *Medieval Liturgical Music*, pp. 78, 83.
29. Nelson, *Medieval Liturgical Music*, p. 80.
30. Later hands overwrote the dry-point line with black ink in 4 (out of 472) liturgical fragments in Aquitanian notation which still survive from the Basque Country. Rodríguez Suso, *La monodia litúrgica*, pp. 482–83, 487.
31. Alvarenga, "Breves notas," p. 208.

the musical meaning was attached to the line because this knowledge allows a correct interpretation of the mode of the piece (in cases where the information was initially provided by the scribe copying the music). The system of positioning the line was simple: in authentic modes the line coincides with the third note above the *finalis* while in plagal modes the line coincides with the *finalis* with the exception of the fourth mode where the line could mean either F (the note above the *finalis*) or E (*finalis*).³² Paolo Ferretti suggested that this exception was a deliberate choice by scribes who wanted to adjust the position of the line to the *ambitus* of pieces in fourth mode.³³ Manuel Pedro Ferreira argued that there was no need to raise the line to accommodate the melodies; he explained the irregular choice of degrees for the fourth mode by referring to the survival of pre-Gregorian psalmodic recitation-tone practices—which could have also influenced the reception of Aquitanian notation in Portugal.³⁴ Later scholars accepted Ferreira's hypothesis, and recognized fourth-mode chants with a preference for the E line as showing greater antiquity. Kathleen Nelson suggests that among the reasons that could have determined the change to the F line there was also “the emphasis placed on the upper semitone positions of F and C by Guido of Arezzo who recommended the coloring of lines on those two positions in the early 11th century.”³⁵ Given that the musical meaning attached to the line in fourth-mode pieces could vary and that the line meaning E possibly signaled an earlier source (or model), it may be particularly revealing to make a systematic inquiry into how the line in fourth-mode pieces was employed in manuscripts in Aquitanian notation. Some scholars have already investigated the meaning of the line in fourth-mode pieces in a selection of Spanish sources and determined that those sources show a trend away from E toward F and, in the thirteenth century, the F-line became the standard for fourth-mode chants.³⁶ A comprehensive survey on the meaning of

32. Paolo Ferretti, “Étude sur la notation aquitaine d’après le Graduel de Saint-Yrieix,” in *Paléographie Musicale XIII: le codex 903 de la Bibliothèque Nationale de Paris, Graduel de Saint-Yrieix (XI^e s.)*, Tournai: Desclée, 1925, pp. 54–211, here pp. 154–59.

33. Ferretti, “Étude sur la notation aquitaine,” p. 161.

34. By putting together evidence concerning the Ambrosian, Galican and Old Hispanic chant (already identified in scholarship as forming a larger “Galican liturgical family”), Ferreira isolated “vestiges of recitation on F-(D) and D-(D), G-(E), F-(E) and sometimes E-(E), A-(F) and the equivalent B-(G), and more rarely F-(F) and G-(G). That is, all the interval relationships (unison, semitone, minor and major third) that provide the hidden structure of line-placement in Aquitanian diastematic notation”: Ferreira, “Notation and Psalmody,” p. 638.

35. Kathleen E. Nelson, “Semitone Indication in a Twelfth-Century Source of Aquitanian Notation in Zamora,” *Revista Portuguesa de Musicologia*, 14–15, 2004–2005, pp. 7–24, here p. 18. Guido of Arezzo assigned the colours yellow and red respectively to the lines for C (a half step above B natural) and F (a half step above E). Michel Huglo, “Toward a scientific palaeography of music,” in *The Calligraphy of Medieval Music*, ed. John Haines, pp. 13–21, here p. 16.

36. Nelson, “Semitone Indication,” p. 17. Amongst the documented collection of Zamoran fragments, only the two fragments in Visigothic script and Aquitanian notation Z 15 and Z 202

the line in Portuguese fourth-mode chants has yet to be made but the preliminary results of this investigation match the tendency observed in Spanish manuscripts, that is, a preference for a F line in forth-mode pieces that became more and more common as time passed.³⁷

Semitone markers

Aquitanian notation without clefs is not diastematic as it does not clarify the exact width of the intervals. This system could create some ambiguity if the reader did not already know the mode of the chant.³⁸ The scribes of some of the earlier Aquitanian manuscripts addressed this problem in different ways (see Table 2 for an overview of the signs employed to signal the location of the semitone in a selection of sources in Aquitanian notation). For instance, the eleventh-century Gradual of St. Yrieix uses a wide range of semitone marking signs: the cursive porrectus, the quilisma, the pes with virga “cornue,” some rising-compound neumes with a “semicircular” virga, and a special punctum as part of a scandicus shape.³⁹ These five useful graphical devices, however, do not signal every single semitone in the manuscript and there are several instances where we would expect to find one of those devices pointing to the semitone, but where the scribe instead wrote regular neumes. Furthermore, some ambiguity persists in the manuscript as there is no special sign to indicate semitones in descending melodic movements.⁴⁰ Scholars have observed that the system employed in the Gradual of St. Yrieix to signal the location of the semitone does not appear to be found in its

employ E as the line pitch of mode four, see Kathleen E. Nelson, “Two Twelfth-Century Fragments in Zamora: Representatives of a Period of Transition,” in *Encomium Musicae. Essays in Honor of Robert J. Snow*, ed. David Crawford and Grayson Wagstaff, Hillsdale: Pendragon Press, 2002, pp. 161–74. And Nelson, *Medieval Liturgical Music*, p. 84. In Rodríguez Suso’s catalogue of the musical fragments in the Basque Country, only Fragment 155—copied between 1180 and 1200—employs the E line for mode four: see Rodríguez Suso, *La monodia litúrgica*, p. 522. The E line is also found in E-Tc, 44.2 (Antiphoner from Toledo Cathedral, probably c.1095—this manuscript shares distinctive liturgical elements with the Cluniac house of Moissac in Aquitaine).

37. The origin of the fragments is discussed below, “Plainchant fragments in Braga and Guimarães,” while the meaning of the line is discussed in “Graphical changes and continuities in function and appearance,” section *Line(s) for notation*.
38. In diastematic notation the vertical position of the neumes on the page represents their height; in this kind of notation the size and direction of each interval could be determined according to the relative height of the neumes.
39. See Ferretti, “Étude sur la notation aquitaine,” and Christelle Cazaux-Kowalski, “Le graduel de Saint-Yrieix (Bibliothèque nationale de France, ms. latin 903),” in *Les chapitres séculiers et leur culture. Vie canoniale, art et musique à Saint-Yrieix (VI–XIII^e siècle). Actes du colloque international, Université de Limoges / Université de Poitiers, 18–20 juin 2009*, ed. Claude Andrault-Schmitt and Philippe Depreux, Limoges: PULIM, 2014, pp. 507–31.
40. Except for the two initial notes of the cursive porrectus, which is scarcely used in the manuscript, Cazaux-Kowalski, “Le graduel de Saint-Yrieix,” p. 516.

TABLE 2 • Signs employed to signal the location of the semitone in a selection of sources in Aquitanian notation

	Special punctum	Quilisma	Virga cornue	Semicircu- lar virga	Cursive porrectus
F-Pn, ms. lat. 1139	X	X	X		
F-Pn, ms. lat. 903 <i>Gradual of St. Yrieix</i>	X	X	X	X	X
P-BRad, MS 1000 <i>Missal of Mateus</i>	X				
P-Pm, Ms. 1134 <i>Pontifical of Braga</i>	X	X		X	
P-Ln, Alc. 162 <i>Pontifical of Braga</i>	X				
P-Pm, Ms. 114, Santa Cruz 24 <i>Psalterium of Santa Cruz de Coimbra</i>	X				
Fragments now in Braga and Guimarães	X				
E-Tc, Ms. 10.5	X	X			
Zamora (Fragments 196, 199, and 200)	X	X		X	
E-SAu, Ms 2637	X				
Basque Country		X			

entirety in any other manuscript. For example, the cursive porrectus—which is used for the melodic movement F-E-F or C-B-C in the Gradual of St. Yrieix—is not associated with the semitone in the Gradual of Gaillac.⁴¹ On the other hand, the same use of the quilisma in the Gradual of St. Yrieix—that is, a punctum followed by a quilisma to signal a tone + semitone (e.g. A-B-C)—can be observed in the slightly later manuscript F-Pn, ms. lat. 1139.⁴² In this manuscript the special punctum (as part of an ascending movement) is frequently used and it could either serve as a liquescence or be associated with the semitone, whereas in the Gradual of St. Yrieix, the special punctum is rarely used.⁴³ The last manuscript to be discussed here is a source that connects Aquitaine and Portugal, that is

41. *Il Cod. Paris Bibliothèque nationale de France Lat. 776. Sec. XI Graduale di Gaillac*, ed. Nino Albarosa, Heinrich Rumphorst, and Alberto Turco, Padova: La Linea editrice, 2001, p. xxvii.
42. The three-note group could be either associated with a single syllable or part of a longer melisma. Cazaux-Kowalski, “Le graduel de Saint-Yrieix,” p. 517. Colette, “La notation du demi-ton,” p. 303.
43. The special punctum is also found in other sources from the Limousine region. Colette, “La notation du demi-ton,” pp. 303–4. In addition to the quilisma and the special punctum, F-Pn, ms. lat. 1139, employs also the virga “cornue” to mark the lower note of the semitone.

the twelfth-century “Pontifical of Braga” (P-Pm, Ms. 1134). It was copied in Toulouse after 1175 and its notation has the following markers with tonal meaning: the tilted punctum for the semitone, the pes with semicircular virga (when the virga joins the following note), the quilismatic scandicus for the minor third (with the semitone between the notes of the quilisma-pes).⁴⁴

With regard to the use of semitone markers in Portuguese territories, the most important research is certainly the pioneering study by Solange Corbin on Portuguese sacred music. Corbin identified a “Portuguese notation” claiming that its main feature was the use of a virga or a lozenged punctum to mark the lower note of the semitone (E or B). Specifically, Corbin affirmed that the so-called “Portuguese notation” was derived from Aquitanian notation—from which it took the diastemata and the use of the red line—but it departed from that notation by displaying a more pronounced angularity, a bigger module, the presence of superimposed square notes and, above all, the use of a virga or a lozenged punctum to mark the lower note of the semitone (E or B).⁴⁵ Additionally, Corbin claimed that there was no trace in France of a similar system to mark the semitone.⁴⁶ Corbin’s study was the first attempt to make an inventory of Portuguese medieval musical codices or fragments (even though she also included some sixteenth-century sources) and it is valuable in this respect.⁴⁷ However, Corbin’s conclusions regarding the so-called “Portuguese notation” were later partially reconsidered. In 1957 Corbin adjusted her position to assert that we do not find an independent notation in Portugal; instead, we find a peculiar sample of Aquitanian script which became more and more stylised so that it could, eventually, be identified as a “subgroup” of the Aquitanian notation.⁴⁸ Marie-Noël Colette pointed to the presence of the special sign for the semitone in Southern French sources (especially

44. Joaquim Oliveira Bragança, “Pontifical de Braga do século XII,” *Didaskalia*, 7, 1977, pp. 309–98, quoted from João Pedro d’Alvarenga, “Fragmento de un Breviário notado bracarense do século XIII,” in *Estudos de Musicologia*, Lisbon: Colibri, Centro de História da Arte da Universidade de Évora, 2002, pp. 11–33, p. 23, n. 36.

45. Corbin, *Essai sur la musique religieuse portugaise*, pp. 251–58.

46. Corbin, *Essai sur la musique religieuse portugaise*, p. 252.

47. See the annexed table (Classement des Manuscrits musicaux portugais antérieurs au xvr^e siècle) given in Corbin, *Essai sur la musique religieuse portugaise*, pp. 192–93. A critical reading of Corbin’s book and a discussion of the reception of her monograph in later Portuguese scholarship can be found in Manuel Pedro Ferreira, “Medieval Music in Portugal Within its Interdisciplinary Context (1940–2010),” in *The Historiography of Medieval Portugal (c.1950–2010)*, ed. José Mattoso, Lisbon: Instituto de Estudos Medievais, 2011, pp. 111–29.

48. Solange Corbin, *La notation musicale neumatique. Les quatre provinces lyonnaises: Lyon, Rouen, Tours et Sens*, PhD thesis, Université de Paris, 1957, p. 121: “Une graphie Aquitaine peu à peu stylisée et devenue un sous-groupe.” Quoted from Manuel Pedro Ferreira, “Solange Corbin et les sources musicales du Portugal,” in *Solange Corbin et les débuts de la musicologie médiévale*, ed. Christelle Cazaux-Kowalski, Jean Gribenski, and Isabelle His, Rennes: Presses universitaires de Rennes, 2015, pp. 77–88, here p. 87.

from Moissac and Limoges), particularly in F-Pn, ms. lat. 1139.⁴⁹ Ferreira investigated the early Gregorian liturgical practices imported into Portugal, mainly in the area of Braga, and acknowledged a close connection between this Portuguese repertory and the one from Occitania, basing his analysis on solid musical, liturgical, and palaeographical evidence.⁵⁰ Subsequently, João Pedro d'Alvarenga reiterated that there is not enough palaeographical evidence to claim the existence of an independent "Portuguese notation" preferring instead the idea of a notational system imported from Southern France, which developed into a regional variety of notation that eventually led to the simplification of the original graphical repertory.⁵¹ Furthermore, while acknowledging the presence of a notational device conveying intervallic information, Alvarenga rejects the claim that this was employed in the majority of Portuguese manuscripts, as Corbin had previously asserted.⁵²

Following up Colette's remarks, it is now widely accepted that the use of a lozenged (or tilted) punctum to indicate the location of the semitone may have entered territories of modern Portugal and Spain from its use in the regions of Moissac, Limoges, and Toulouse. However, it remains unclear how and when this happened. Colette suggested that the special punctum may have arrived in Portugal with the famous *Missal de Mateus* (P-BRad, MS 1000) dated between 1130–1150.⁵³ This manuscript is the oldest existing source for the restored church of Braga and the few notated sections show the characteristic special punctum for the lower semitone (see Fig. 3 and fols. 7v, 8r, 109r, 110v).⁵⁴ Specifically, in the *Missal de Mateus* the special punctum has a rhomboidal shape and it is used both isolated on a single syllable and in descending melodic movements; when found in ascending melodic movements, the special punctum occasionally takes a virga shape. Colette's assertion that the special punctum arrived in Portugal with the *Missal de Mateus* was later rejected by other scholars who claimed that the sections of the *Missal of Mateus* containing music were notated

49. Colette, "La notation du demi-ton," pp. 306–8.

50. See Ferreira, "As origens do Gradual," pp. 172–73, and "A música na Sé de Braga." In a more recent study, Ferreira explored the impact of Corbin's legacy on Portuguese musicological studies and beyond, see "Solange Corbin et les sources musicales du Portugal."

51. Alvarenga, "Breves notas," p. 210. Alvarenga had already concisely rejected the claim of an independent "Portuguese notation" in "Fragmento de un Breviário," pp. 12–13, n. 6.

52. Alvarenga, "Breves notas," p. 207.

53. Colette, "La notation du demi-ton," p. 306.

54. The *Missal de Mateus* was copied in Southern France, probably Limoges, and brought to Braga around the mid twelfth century. Despite the importance of this manuscript and the attention it received, its provenance, contents and use are still open to debate. On the *Missal de Mateus* see: *Missal de Mateus. Manuscrito 1000 da Biblioteca Pública e Arquivo Distrital de Braga*, ed. Joaquim Oliveira Bragança, Lisbon: Fundação Calouste Gulbenkian, 1975. Ferreira, "As origens do Gradual," pp. 70–73.

after the arrival of the manuscript in Braga.⁵⁵ The known Portuguese manuscripts that use the special punctum include the thirteenth-century Pontifical of Braga (P-Ln, Alc. 162) and the later *Psalterium of Santa Cruz de Coimbra* (P-Pm, Ms. 114, Santa Cruz 24). The former shows a special punctum that resembles an apostrophe (tilted *c.*45° and slightly stretched) and, in this case, the special punctum is widely but not consistently used.⁵⁶ In the *Psalterium* the special punctum takes the shape of a lozenge and it is much more consistently used; additionally, in this manuscript, in the pieces which end in E, the line can mean G, F, or E.⁵⁷

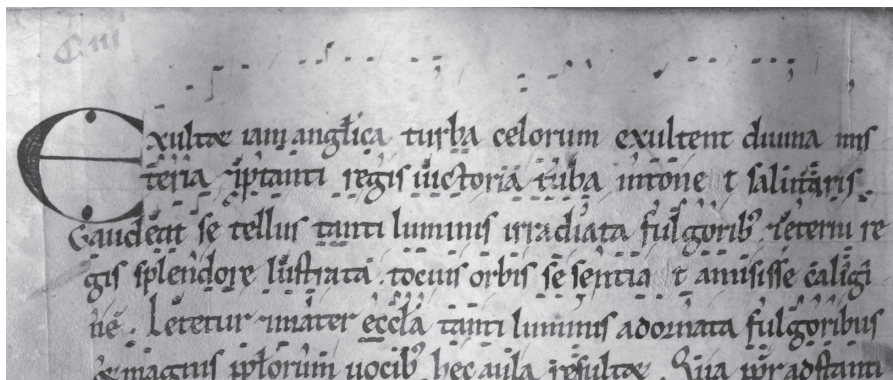


FIGURE 3 • *Missal de Mateus* P-BRad, MS 1000, p. 111 (detail), 1 *turba, celorum, divina*., 2 *et pro, regis*, etc., © Universidade do Minho/Arquivo Distrital de Braga (document PT/UM-ADB/COL/M/1000)

The use of a special punctum to mark the semitone is very rare in Spanish manuscripts. Nonetheless, there are a few Spanish sources which stand out for their use of the lozenged punctum and other markers to signal the lower note of the diatonic semitone. Kathleen Nelson investigated an early twelfth-century antiphoner fragment in Visigothic script and Aquitanian musical notation that is currently part of the later binding of a thirteenth-century book, E-Tc, Ms. 10.5.⁵⁸ The notation of this two-folio fragment shows a clear indication of the semitone location; the two semitone marking signs are a three-note quilismatic group covering minor thirds or a perfect fourth with the semitone located between the top two notes, and a special punctum (diamond shape) used either in isolation or as part of a descending pattern of two or more notes on one syllable; in the latter context, the special punctum is the second note (that is, it is placed a minor

55. Nelson, "The Notated Exultet," p. 33. Alvarenga, "Breves notas," p. 210.

56. Alvarenga, "Breves notas," p. 209.

57. Alvarenga, "Breves notas," pp. 208–9. For some graduals in fifth mode with the line meaning F instead of A, e.g. *Quis sicut Dominus*, see Cazaux-Kowalski, "Le graduel de Saint-Yrieix," p. 514.

58. Nelson, "Observations," p. 17.

second below the note immediately preceding it).⁵⁹ As observed in other sources in Aquitanian notation, and also in this fragment, the semitone markers are not used in every occurrence of the lower semitone pitch.⁶⁰

Nelson also investigated the notation of some slightly later bifolio fragments currently kept in Zamora and originally belonging to a noted breviary written in a Protogothic text hand in the second half of the twelfth century, possibly in the central or North-western part of the Iberian Peninsula.⁶¹ Here, three graphical devices are used to indicate the semitone: the semicircular virga, the special punctum, and the quilisma. As Nelson points out, these three devices are known as semitone indicators in other manuscripts. However, no other source appears to use these signs in the same way as in the Zamoran fragments. For instance, the semicircular virga is used in the Gradual of St. Yrieix on the top note of the semitone interval (C, F, and occasionally on B-flat) while in the Zamoran fragments it always occurs on E or B.⁶² Thus, the use of the semicircular virga in the Zamoran fragments resembles the use of the virga “cornue” in the Gradual of St. Yrieix, which always appears on the lower semitone.⁶³ In the Zamoran fragments the special punctum has a curved form, sometimes with a short tail descending to the right.⁶⁴ Here, the special punctum can be found both in isolation (but not consistently used) and at the end of a descending neume with the upper note of the semitone always preceding the special punctum.⁶⁵ Regarding the quilisma, Nelson clarified that it is the most used semitone indicator in the Zamoran fragments and its use is concordant with other sources in Aquitanian notation, hence, the quilisma is placed on the lower note of the semitone at the centre of a pattern of three rising notes usually covering a minor third A-B-C, D-E-F or even G-A-B-flat. Apart from one exception, there are no instances of a quilisma group covering an interval greater than a third.⁶⁶ Broadly speaking, in Aquitanian notation associated with Spain the use of the quilisma to signal the lower note of the semitone became more regular only from about the middle of the twelfth century, while before this date sources tend

59. Nelson, “Observations,” p. 22.

60. Nelson, “Observations,” p. 22.

61. Zamora, Archivo Histórico Provincial, Pergaminos musicales 196, 199, 200. See Nelson, *Medieval Liturgical Music*, pp. 86–87, 92–93, 180–81, 232, 294. And “Semitone Indication.”

62. Nelson, “Semitone Indication,” p. 14.

63. It is also important to highlight that the note following the semi-circular virga can be of variable pitch and it is usually the first note of the next syllable. This feature distinguishes the Zamoran fragments from other Aquitanian sources where the semi-circular virga is commonly followed by a note at the same pitch. Nelson, “Semitone Indication,” pp. 14–15.

64. Nelson, “Semitone Indication,” plate 2, p. 23.

65. Nelson, “Semitone Indication,” p. 15.

66. In fragment 202 the quilisma occurs both on minor and major thirds. Nelson, “Two Twelfth-Century Fragments,” p. 168. And “Semitone Indication,” p. 16.

to employ the quilisma on a wide variety of pitches.⁶⁷ From the early to the late sources in Aquitanian notation in Zamora it is possible to observe an increase in the size of the neumes. Over this period the neume shape changed from rounded and imprecise shapes to square puncta with angular corners; in later sources the lozenged upper head of the virga is replaced by a squarer head. A marked contrast also appears between hairline stems and thick note-heads, which was not evident in the smaller and earlier notations.⁶⁸

Finally, it is worth mentioning another example of a (presumably) Spanish manuscript that uses the special punctum, E-Sau, Ms 2637.⁶⁹ This manuscript is a Plenary Missal and it contains the most extensive sanctoral in any extant Gregorian missal from the Iberian Peninsula. The sanctoral shows a clear Frankish influence, though it preserves some chants from the Spanish sanctoral, and there are also notable correspondences with earlier manuscripts from Silos (GB-Lbl, Add. ms. 30848 and Add. ms. 30849).⁷⁰

Regarding the Basque Country, scholars acknowledged that despite the flourishing of parishes in the second half of the twelfth century, no liturgical books from this era survive. Even so, 472 liturgical fragments with Aquitanian notation survive; they are dated from the twelfth to the sixteenth century and were written mainly in the southern part of the region.⁷¹ The main characteristics of the notation of these fragments are: the presence of two shapes of punctum—square and rhomboidal—which never convey semitonal information;⁷² absence of any virga with semitonal meaning (including the virga “cornue” and the semicircular virga);⁷³ a great variety of liquescent neumes (not associated with the semitone) and custos shapes;⁷⁴ occasional occurrence of the pes stratus; absence of the neumes

67. Information on the meaning of the quilisma in other Spanish manuscripts written in Aquitanian notation is provided in Nelson, “Semitone Indication,” p. 16–18. And *Medieval Liturgical Music*, pp. 87–88.

68. Nelson, *Medieval Liturgical Music*, pp. 81–82.

69. The Missal is available on PEM.

70. *Hispania Vetus*, p. 378. The most recent publication on the Salamanca Missal is an article that contains a discussion of its contents and an overview on the previous hypothesis of origin and dating: Océane Boudreau, “Un missel ibérique de la seconde moitié du XII^e siècle (Salamanque, Biblioteca General Histórica, ms 2637),” *Revista Portuguesa de Musicologia*, 3/2, 2016, pp. 65–110.

71. The plainchant preserved in these fragments can be ascribed to the liturgical tradition of Southern France (music, liturgical order, and calendar). Rodríguez Suso, “La notación aquitana,” and *La monodia litúrgica*.

72. Rodríguez Suso, *La monodia litúrgica*, pp. 492, 507.

73. Rodríguez Suso, *La monodia litúrgica*, pp. 494, 507.

74. A custos is an optional punctum with a fine line ascending/descending diagonally on the right/left side and it provides the height of the first note on the following line; the custos is generally placed at the end of a line.

derived from the oriscus;⁷⁵ consistent use across the fragments of a single key-line (no fragment was found with notation in *campo aperto*);⁷⁶ and, finally, graphical variants of the neume shapes unrelated to any rhythmical significance.⁷⁷ On rare occasions the fragments show indications concerning the mode of the chant. For instance, indications such as “septimi toni” can be found at the beginning of a piece. These kinds of indications were commonly written in red ink, in smaller module, and in a more cursive style than the script on the rest of the page. Another type of indication shows the number of the mode in red ink at the beginning of the piece.⁷⁸ The B-flat can also occasionally be found in the later fragments from the Basque Country (although it is not always clear whether it was written by the original notator or added by a later hand) and it has been argued that its presence in these sources hints that the solmisation system based on the hexachord was probably becoming obsolete so this kind of sign was regarded as a helpful reminder.⁷⁹

Regarding the use of the quilisma in the Basque Country, Rodríguez Suso explains that it was commonly used to indicate the lower note of the semitone, and it is only in very few cases that the quilisma was not used for this purpose.⁸⁰ The close correspondence between the quilisma and the lower note of the semitone became less regular in the fifteenth and sixteenth centuries.⁸¹ Despite this, sixteenth-century treatises often refer to the usefulness of the quilisma to discover the position of the semitone.⁸²

Rodríguez Suso provides some useful explanations of why Aquitanian notation was eventually replaced by square notation in the Basque Country only in the sixteenth century. She refers to 1) the easiness of reading square notation (to write Aquitanian notation, the scribes had to master the system of the key-line in the authentic and plagal modes); 2) the spread of a musical style which made more use of musical accidentals and a wider ambitus; 3) the growing need for large choirbooks for choral practices; 4) a reaction against the old medieval culture, with which the books in Aquitanian notation were closely associated.⁸³

75. The oriscus is not found after the fourteenth century. Rodríguez Suso, *La monodia litúrgica*, p. 511.

76. Rodríguez Suso, “La notación aquitana,” p. 2298.

77. Rodríguez Suso, “La notación aquitana,” pp. 2301–302.

78. Rodríguez Suso, *La monodia litúrgica*, p. 518.

79. Rodríguez Suso, *La monodia litúrgica*, pp. 518–19.

80. Interestingly, in the antiphon *Compertus vir* in fragment 582 a later hand replaced the square punctum on B with a quilisma. Rodríguez Suso, *La monodia litúrgica*, pp. 503–6.

81. Rodríguez Suso, *La monodia litúrgica*, p. 506.

82. Rodríguez Suso, *La monodia litúrgica*, pp. 504–5. Domingos Marcos Durán, *Comento sobre Lux Bella*, Salamanca: [no printer], 1498; facsimile, Cáceres: Universidad de Extremadura, 2002, fols CI–CII.

83. Rodríguez Suso, “La notación aquitana,” pp. 2304–305.

In the Basque Country, Rodríguez Suso classifies the late Aquitanian notation in two broad categories, the “notación aquitana evolucionada” which shows some influence of square notation but still maintains typical Aquitanian features; and the later “notación aquitana tardía” (dated to the fifteenth and sixteenth centuries) which shows a much stronger influence from, and dependence on, the characteristics of the square notation.⁸⁴ More specifically, the changes that occurred to the appearance of Aquitanian notation in the Basque Country from the twelfth to the sixteenth century are: 1) better separation of the neumes and neumatic groups (that is, better use of the space and occasional use of musical bars); 2) an increase in the module of the notation; 3) increased angularity and adoption of more rhomboidal and square shapes; 4) changes in the internal ductus of compound neumes;⁸⁵ 5) loss in graphical variety of the neumes, liquescent ones included; 6) extensive use of “ligature,” that is, thin lines that connect the square puncta within compound neumes; 7) and finally, loss of proportion between the music and text area.⁸⁶

The special punctum in the fragments in Braga and Guimarães

The previous overview of the different systems of Aquitanian notation allows us to better understand the original context of Aquitanian notation (Southern France) and to gain a deeper comprehension of how this notation was later adopted in Spanish territories. This understanding of the bigger picture of the diffusion of Aquitanian notation allows us to place the analysis of the notation of the fragments in Braga and Guimarães into a wider comparative perspective thus permitting us to recognize any idiosyncrasies developed by the scribes of the fragments.

In Spanish manuscripts a historic change can be recognized in the preference for one or the other mi-signs and their systematic application. The special punctum is mainly found in the earlier Spanish sources and was subsequently dropped, whereas in the fragments in Braga and Guimarães a more regular use of the special punctum is found in the later sources. This may suggest that after an initial phase of learning and adoption of the Aquitanian notation in

84. Rodríguez Suso, *La monodia litúrgica*, p. 530.

85. Further information on the changes to the ductus can be found below, “Graphical changes and continuities in function and appearance.”

86. All these changes are fully discussed in Rodríguez Suso, *La monodia litúrgica*, pp. 524–30. The author also mentions that a change occurred in the layout of codices, first featuring two columns and then a full-page column (p. 509) and Rodríguez Suso, “La notación aquitana,” pp. 2302–303.

Iberia—where the local scribes did not creatively edit or rework the elements of the foreign music script⁸⁷—some local uses started to develop, and they seem to have been limited to the choice of strategies for marking the semitone. Apparently, as time passed, these local uses were subjected to further changes; in some cases, some semitone-marking strategies were discarded (Zamora) and in others, a semitone marking strategy became gradually entrenched, like the special punctum in Portugal. However, the identification and meaning of the lozenged punctum is not always straightforward due to the variation in neume shapes, especially in the earlier sources. So it is worth briefly defining the different shapes of puncta found in the fragments in Braga and Guimarães before discussing in detail the dissemination of the lozenged punctum used as a mi-sign in the same fragments.

Squared, lozenged, and tilted puncta

A variety of shapes and sizes of the punctum can be observed in the fragments now in Braga and Guimarães, sometimes even within one single source.⁸⁸ Generally speaking, there are two main categories of punctum, the one that lies horizontally and the punctum slanted to the right (lozenged/tilted) which may, or may not, be used as a mi-sign (Table 3). The group of puncta that lie horizontally includes the square punctum, which is the most common shape (Table 3, column 1), the rectangular punctum, which is rarer (column 2), and the parallelogram-like punctum, which has lateral edges tilted to the right (column 3). The second group has the lozenged punctum, found almost everywhere (column 4) and the tilted punctum, which is rarely found (column 5).⁸⁹ The presence of parallelogram-like puncta in the early sources can be difficult for modern readers to interpret, especially when it comes to distinguishing this shape from the lozenged punctum (like in P-BRad, 244). In some cases, however, even if a horizontal punctum is written with a strong inclination of the vertical axis to the right, it seems plausible to interpret it as a horizontal punctum and not a lozenge due to the normal ductus of a particular scribe's hand (P-BRam, N° 5 Códices). In some instances, further confusion is generated by the presence of the virga, which is usually written with a square head and a tail (Table 4, column 1). On some occasions the virga is written with a lozenge-like head (column 2) and, if the material condition of the fragment is poor, the left stem of the virga may vanish, thus creating uncertainty. Fragment P-BRad, 150 shows an additional type of virga (column 3), which is

87. The only exception being the custos—see below, “Graphical changes and continuities in function and appearance.”

88. See P-BRad, 46; P-G, C 1423, P 808; etc. See also the description of class 1a notation in Nelson, “Two Twelfth-Century Fragments,” p. 171 and *Medieval Liturgical Music*, p. 81.

89. The tilted punctum is also found in P-BRad, 82; P-G, N 84; P-Gsc, 225.

made of a tilted square (the head) and a small lozenge for its tail.⁹⁰ Finally, to complete this overview of neumes made up of lozenges, the liquescence found in P-G, N 24 has a lozenge followed by another smaller lozenge with a descending stem on the right (column 4).⁹¹

TABLE 3 • Main shapes of punctum










Square punctum	Rectangular punctum	Parallelogram-like punctum	Lozenged punctum	Tilted punctum
				
P-G, C 1372, Ar, line 1	P-BRad, 46, recto, line 7	P-BRad, 51, 157v, line 2	P-G, C 627, verso, line 3	P-BRad, 6, recto, line 12

TABLE 4 • Some virga shapes and a liquescence with lozenge

Virga with a square head and a tail	Virga with a lozenge-like head and a tail	Virga with a tilted square and a small lozenge as tail	Liquescence made of two consecutive lozenges
			
P-BRad, 82, fol. Br, line 9	P-BRad, 15, fol. 23, line 8	P-BRad, 150, fol. 100v, line 2	P-G, N 24, fol. Br, line 3

The identification of the lozenged/tilted punctum is more problematic in the sources dated up to the thirteenth century. In later sources, both the punctum that lies horizontally and the lozenged/tilted punctum gradually took a more angular shape with a precise contour and consistent shape and dimension. Fragments from the fourteenth century onwards not only show a bigger module in the notation but also an unequivocal graphical differentiation between the two main categories of puncta.⁹²

90. In this fragment we can also observe a bigger lozenge serving as special punctum.

91. See for example on fol. Br (right half) the first music line with the beginning of the antiphon “E(...) sancta dixit” (Cantus ID 003024) or the oriscus on “Lignum,” on the third music line below on the same page.

92. The kinds of punctum found in the fragments studied here roughly correspond to the same shapes that Rodríguez Suso identified in the Basque Country: the square punctum, the rhomboidal punctum, the “punto oblungo” (which resembles a rectangle), the “punto ondulado” (which has a somewhat wavy shape). The presence of these kinds of shapes is due to the cut of the quill, the extent to which the quill has been worn out, and the way that weight is applied in

Dissemination and meaning of the lozenge/tilted punctum

Based on the presence/absence of the lozenge/tilted punctum and its function, I have classified the fragments into four groups: 1) fragments without lozenge/tilted punctum; 2) fragments where the lozenge/tilted punctum is found but does not convey any semitonal information;⁹³ 3) fragments where the lozenge/tilted punctum occasionally carries intervallic information (special punctum); 4) fragments where the special punctum is regularly employed to convey intervallic information.⁹⁴ Each group is then sub-divided into two subgroups depending on the presence of a dry-point line “.1” or a red line “.2.”⁹⁵

The fragments belonging to the first group (without lozenge/tilted punctum) are adiastematic, date from the twelfth or the thirteenth century, and have small neumes.⁹⁶ The regular “square” punctum has lateral borders tilted to the right. This group has the greatest number of fragments with a dry-point line for notation and includes some of the oldest fragments. The presence of the French *custos* hints that these old fragments were copied from French models soon after the change of rite.⁹⁷

In the second group of fragments the lozenge is commonly found as part of compound descending neumes; more rarely, it is found isolated. The number of lozenges found in the fragments varies: e.g. in P-BRad, 8 there is only one isolated lozenge (on *populo* on fol. Ar), whereas in other sources the lozenge is more consistently used. In the earlier fragments (see Appendix 2) the neumes are small, their graphical contour is irregular, and the lateral borders of the “square” punctum are tilted to the right. In the most modern fragments the graphical difference between the lozenge and the square punctum is clearly defined, and the downward melodic movement within compound neumes frequently shows a series of lozenges with a square punctum at the bottom (Fig. 2). Possibly, as Rodríguez Suso suggested, the presence of the lozenges in a descending melodic

the act of writing; for instance, the angle of the cut of the quill could be the reason why some “square” puncta have more height than width (this feature is found mainly in the thirteenth century, but occasionally also in the fifteenth). Rodríguez Suso, *La monodia litúrgica*, p. 493.

93. Similarly, in the twelfth-century Zamoran fragment (Z 268) the lozenge and the square punctum are used interchangeably. Nelson, *Medieval Liturgical Music*, p. 83.

94. To this group could be added virtually the fragment now kept in the Biblioteca Nacional in Lisbon, P-Ln, M.M.F. 7, which is representative of the Braga office and is dated to the first quarter of the thirteenth century. The fragment shows a single line for notation (originally painted in yellow) and the tilted *punctum* is used almost systematically to mark the lower note of the semitone. On this fragment see Alvarenga, “Fragmento de un Breviário.”

95. The full list of fragments belonging to each group and subgroup is found in Appendix 2, where all the sources are chronologically ordered.

96. The thirteenth-century fragment P-G, N 328 has medium size neumes.

97. See description below and Fig. 6.

movement facilitates the identification of the notes by means of a better graphical separation.⁹⁸

The third group gathers all the fragments where there is an inconsistent usage of the special punctum. The lozenged/tilted punctum is occasionally used to hint at the position of the lower note of the semitone.⁹⁹ Broadly speaking, there are two types of fragments in this group: those where the location of the semitone is often unclear and those that provide more consistent information about intervals.

In the fourth group the special punctum is employed to convey information on the semitone. Within one chant the special punctum could be used either to hint at the location of the lower note of the semitone (= the special punctum was not written in every occurrence of the pitch), or to systematically highlight all the diatonic semitones in the piece. In group 4 there are only 2 fragments out of 27 with a dry-point line for notation. Fragments in this group date from the late twelfth to the fifteenth century, with a minority of sources dated to the fourteenth and fifteenth centuries (10 out of 27). Unlike the fragments in groups 1 and 2 where no diastematic information is provided, the fragments in groups 3 and 4 are particularly relevant for this research because they present various degrees of semitonal information (and consequently diastematic precision) and thus, they can bring new evidence to the analysis of the systems for notating plainchant.

For instance, among the fragments in group 3, P-BRam, N° 13 Códices is one of those where the identification of the semitone is not so straightforward. This fragment is a central bifolium from an Antiphoner, and it is from the twelfth or thirteenth century. The fragment displays small neumes, custodes and an axis of notation slightly slanted to the right. Lozenges are found in descending neume patterns and there is no more than one lozenge per neume (e.g., lozenges are found on fol. Ar, lines 10, 11, 13; fol. Br lines 3, 5, 6, 8, 9, 11, 12, etc.). The fragment contains 32 chants. Of these, only two have the special punctum (the responsories “In omnibus” Cantus ID 006920, on fol. Av, and “Tribularer” Cantus ID 007778, on fol. Br). In both, the special punctum is inconsistently used (see the transcriptions in the Musical Examples). In “In omnibus” (Example 1), the note E appears 20 times, and in 5 instances it is signalled by a lozenge shape, thus suggesting that the piece is in first mode (line: F, *finalis*: D).¹⁰⁰ In “Tribularer” (Example 2) the note E is found 4 times, but it only has a lozenge over *publicanum*

98. Rodríguez Suso, *La monodia litúrgica*, p. 491.

99. Like the fragments in group 2, the early fragments in group 3 also have the square punctum with lateral borders slanted to the right.

100. As can be seen on Cantus Index, this piece is commonly found in first mode.

(on the penultimate line), which is the central note of a climacus.¹⁰¹ The note B appears 11 times but it is signalled by lozenges only in 3 occurrences, once as the lower note of a *clivis* (*et vivat*), twice as the middle note of a *climacus* (both over *tuas*). As these are the only lozenges in the piece, and they are placed at the same height, it is possible to identify that this piece is in the eighth mode (line and *finalis* meaning G).¹⁰²

EXAMPLE 1 • Responsory "In omnibus" from fragment P-BRam, N° 13 Códices, fol. Av

First Mode

In — om — ni — bus e — xhi — be — a — mus — nos

si — cut de — i mi — — — — — ni — — — — — stros in

mul — ta pa — ti — en — ti — a — ut — non vi — tu —

pe — re — tur — — — — — mi — ni — ste — ri — um — — — — — no — — — — — strum

EXAMPLE 2 • Responsory "Tribularer" from fragment P-BRam, N° 13 Códices, fol. Br

Eight Mode

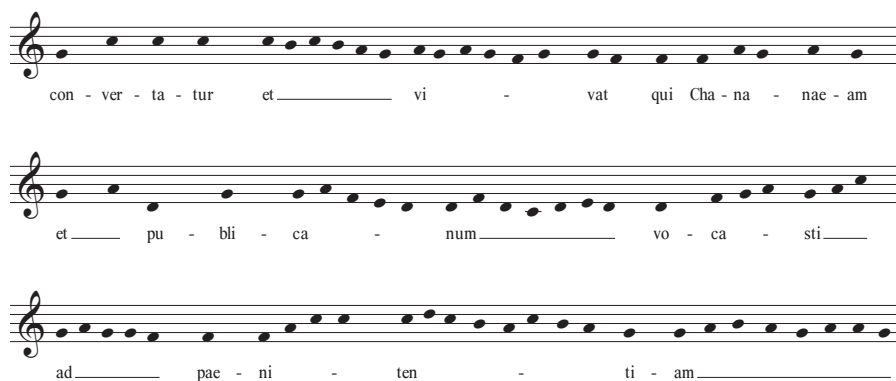
Tri — bu — la — rer si — ne — sci — rem — — — — — mi — se — ri —

cor — di — as tu — as — — — — — do — mi — — — — — ne tu di — xi —

sti no — lo mor — tem — — — — — pec — ca — to — — — — — ris sed ut — — — — —

101. This is the only instance where E is part of a descending melodic movement in this piece.

102. As can be seen on Cantus Index, this piece is commonly found in eighth mode.



Group 3 also provides samples of fragments with a clear semitone indication, like fragment P-BR_{am}, N° 12 Códices, dated to the late eleventh to twelfth centuries. Its notation uses a dry-point line and custodes, and the neumes are very small. The square punctum is definitely tilted to the right but it is clearly distinguishable from the lozenges. From a total of around 28 notated chants, most of which are almost complete, the mode is uncertain in about ten pieces.¹⁰³ For instance, in the two consecutive antiphons Cantus IDs 201977 and 201022, on fol. Ar, the identification of the mode is not possible because both pieces show only one lozenge each. In the pieces where we can observe clearer intervallic information, the lower semitone is quite consistently signalled. For instance, in the Antiphon “Multa” on fol. Ar, Cantus ID 203181, in third mode (line: G, *finalis*: E) the pitch E is signalled by a lozenge in 11 out of a total of 12 occurrences;¹⁰⁴ B, in comparison, is signalled by a lozenge in 4 out of 15 occurrences. This fragment is special in many respects, not only for the peculiar mix of Visigothic script and Aquitanian notation (not found in any other fragment in this set) but also because its special puncta are employed in a variety of ways: as part of descending neumes (*climacus*, *clivis*), as part of ascending neumes, and isolated on a single syllable. The prevailing tendency in the other early sources is to find the special puncta as part of descending neumes and, very rarely, isolated on a single syllable. It is only in more modern fragments that the use of the special punctum becomes recurrent also in ascending neume patterns, as can be observed in single-folio fragment P-G, C 627 (also from group 3, and dated to the fourteenth century). In the communion “Dicite pusillanimes” Cantus ID g00506 lozenges in ascending patterns are found on *ecce*, *salutabit*. Here, the special punctum is placed on the line (which means B) and the piece is in seventh mode (*finalis*: G).

103. These pieces have Cantus IDs: 201977 and 201022 (both on fol. Ar); 200078, 203809, 202727, and 203453 (on fol. Av); 202172, 001644.1, 005186 (on fol. Br); and 003180 (on fol. Bv).

104. Many of these special puncta are found isolated on a syllable.

Among the fragments in group 4, P-BRam N° 4 Códices is among the earliest fragments and here the special punctum is used consistently—but not systematically—either isolated or in combination (in descending and ascending patterns). P-Gsc, 225 and P-G, C 192 (also found in group 4) consistently employ the special punctum, but they are different in other respects. Indeed, P-Gsc, 225 is one of the earliest fragments in this set while P-G, C 192 is the most modern. Furthermore, the special punctum in P-Gsc, 225 is a tilted punctum while it takes the shape of a lozenge in P-G, C 192.

Some remarks on the special punctum

The analysis of the presence of the special punctum used as mi-sign shows that the special punctum is the only graphical device to signal the semitone employed in the fragments now in Braga and Guimarães, as no other system or sign has been detected; however, the fragments show a significant diversity of practice. There are early fragments where the special punctum is quite consistently used but there are also very late fragments where the lozenged puncta are placed at consecutive steps without conveying any information on the diatonic semitone, thus suggesting that the presence/absence of the special punctum was unrelated to the age of the source. This is particularly significant as it does not suggest a progressive and linear development of the notation from a less precise system toward a script that gained diastematic readability as time passed. On the contrary, no innovation could be found in this respect but only the slow diffusion and gradual adoption of the special punctum as semitone marker. Conveying melodic information with greater or lesser precision appears to have been a scribal choice, and this situation endured over the centuries while elsewhere in Europe—and in the context of the Cistercian and Mendicant orders in the Iberian Peninsula as well—square notation was already extensively in use.¹⁰⁵ What truly brings together all the Iberian manuscripts in Aquitanian notation are the graphical changes to larger notational fields and wider pens that occurred from the late eleventh to the fifteenth century. These changes in the fragments of Braga and Guimarães are discussed in the following section and placed in relation to semitone signification.

105. None of the fragments studied here could be ascribed to any of these liturgical orders.

Graphical changes and continuities in function and appearance

In this section I consider each element and then summarise the combined significance of the graphical components of twelfth- to fifteenth-century Aquitanian notation in Iberia.

Ruling

In early Aquitanian manuscripts, such as the eleventh-century Gradual of St. Yrieix (F-Pn, ms. latin 903),¹⁰⁶ the scribes made no distinction between lines drawn for the text or for the music, and all the lines were positioned at the same distance.¹⁰⁷ The same system is found in the earliest liturgical musical fragments from the Basque Country where we can also observe that the size of the text that bears notation is smaller than the module of the non-notated text.¹⁰⁸ In compliance with the system commonly found in sources in Aquitanian notation, the most ancient fragments now in Braga and Guimarães have dry-point lines that were ruled to accommodate either text or musical notation.¹⁰⁹ Normally the odd lines were used for music whilst the even lines were used for text; this ruling system made no distinction between the type of lines drawn to accommodate the text and the music and it did not change over time.

This feature can be found in any fragment regardless of the characteristics of the notation, e.g., group 1.1 (P-BRad, 52), group 2.2 (P-BRad, 28); group 3.2 (P-G, C 635); group 4.2 (P-G, N 20). Nonetheless, a related feature that changed over time was the size of the area devoted to notation. In fact, in some later sources the area for notation could take up two or even three ruled lines. Specifically, it took up two ruled lines in the fifteenth-century fragment P-G, C 1429 and in the fourteenth-century fragment P-G, P 217 (the notation of both fragments can be ascribed to group 2.2, that is, they show some random lozenges over a red line).

106. The Gradual of St. Yrieix along with F-Pn, ms. lat. 776 (Gradual of Gaillac) and F-Pn, NAL 1871 (Troparium of Moissac) are among the earliest diastematic Aquitanian manuscripts: Cazaux-Kowalski, "Le graduel de Saint-Yrieix," p. 513.

107. Ferretti, "Étude sur la notation aquitaine," p. 160. In South West France (Aquitania, Limousin, Provence) the standard ruling in liturgical chant books was as follows: the scribes used pairs of lines to write the texts of the liturgical chants while notation was added around the odd numbered lines (often seemingly without any addition of color); see Huglo, "Toward a scientific palaeography," p. 14 and "The earliest developments," p. 164.

108. Rodríguez Suso, *La monodia litúrgica*, p. 481.

109. Working on digital reproductions of the fragments now in Braga and Guimarães, I was unable to ascertain the original colour of some lines for notation: they may appear today as dry-point lines but originally they may have been ruled with graphite or yellow ink.

The same kind of notation is found in the fifteenth-century fragment P-BRs, Frag. 10, but here the area for notation takes up three ruled lines (Fig. 4).¹¹⁰

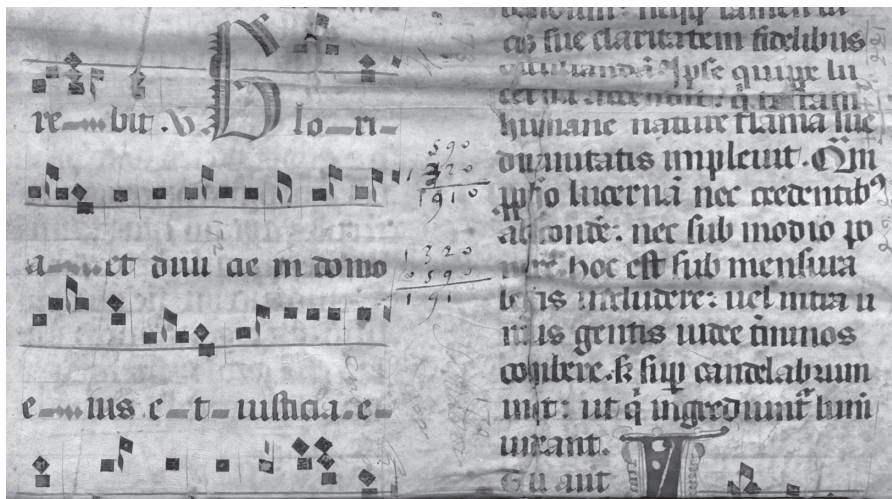


FIGURE 4 • P-BRs, Frag. 10, recto (detail), the area for notation covers three ruled lines (15th century)

Layout

According to Rodríguez Suso, later codices from the Basque Country show a change in the layout (first featuring two columns, then a full-page column).¹¹¹ In the fragments now in Braga and Guimarães we can see a similar tendency. While the full-page layout can be observed in early sources, like the fragment in Visigothic script and with consistent use of the special punctum, P-BRam, N° 12 Códices, it is only in later sources that the full-page layout becomes more common. Almost all the fragments dated to the fifteenth century come from choirbooks with full-page music (the only exceptions are P-G, C 1429 and P-BRs, Frag. 10, mentioned before). The majority of the fragments dated to the fourteenth century also give prominence to full-page layouts, the only exceptions being fragment P-G, P 217 (mentioned above), and P-G, N 20, N 37, and P 714 (all belonging to group 4.4 and with an area for notation that takes only one ruled line).

Line(s) for notation

Neumes in *campo aperto* are found only in the Visigothic fragment (now lost) P-BRad, Pasta dos documentos visigóticos, s. n., and in the later addition at the top-right

110. It is unclear whether in fragment P-BRad, 169 the area for notation takes the space of two or three ruled lines due to the peculiar layout of this fragment. Its notation shows occasional occurrence of the special punctum.

111. Rodríguez Suso, *La monodia litúrgica*, p. 509 and “La notación aquitana,” pp. 2302–303.

corner of fol. Ar in P-G, C 809.¹¹² In the other fragments, only a single line for notation is found. The neumes are placed around either a dry-point or a red line (no dark or yellow lines can be found here).¹¹³ As can be seen in Appendix 2, a red line is already used in the twelfth century but its presence becomes more and more regular from the thirteenth century onwards. Instead, the dry-point line for notation is mostly found in the twelfth century but also in the thirteenth century and possibly later. The fragments with a red line (85) greatly outnumber those with a dry-point line (17) and the special punctum is commonly found over a red line. However, three exceptions exist: P-BRam, N° 12 Códices, P-G, C 809, and 10-9-9-1. These fragments are not very modern, the first being dated to the eleventh to twelfth centuries, and the other two to the thirteenth century. In the first fragment the special punctum is not consistently employed while in the others it is employed to signal the lower semitone in all pieces.

Pieces in the fourth mode in the fragments of Braga and Guimarães commonly employ a line to indicate F. The only exceptions I have found are the following chants: Alleluia “Laudate Deum” (Cantus ID g00622) P-BRad, 23; Responsory “Surge ... et induet” (no Cantus ID) P-G, N 20;¹¹⁴ Antiphon “Cum Vir” (Cantus ID 201058) P-BRam, N° 12 Códices.

Letter-clefs

In the liturgical fragments from the Basque Country, the earliest examples with letter-clefs can be dated to the fourteenth century and, from this time onwards, clefs are found more often.¹¹⁵ In comparison, clef signs are not found in the sources from Zamora in Aquitanian notation.¹¹⁶ According to previous scholarship, the use of a staff with three or more lines with letter-clefs in combination with Aquitanian notation is quite rare in Portugal.¹¹⁷ In this palaeographical survey letter-clefs have been found only in 5 fragments: P-BRad, 176 (F, b, D); 210 (F, G, b); P-G, C 1206 (F); P-G, P 280 (F, G, b); P-Gsc, 225 (F). According to the characteristics of the notation, all these fragments belong to group 4.2. The only exception is P-BRad, 210, which has random lozenges and thus belongs to group 2.2.

112. In the Visigothic fragment the neumes were written instead by the original notator.

113. The only exception is the addition in a later hand found at the bottom of the recto of P-BRad, 25 where both text and music are written in brown ink and the dry-point line for ruling has been overwritten with the same brown ink.

114. Interestingly, other pieces in the fourth mode in the same fragment have a line which means F.

115. The letter-clefs found in the fragments are A, F and G, B. They can be found either at the beginning of the line or at the beginning of a piece. Rodríguez Suso, *La monodia litúrgica*, pp. 516–17.

116. Nelson, *Medieval Liturgical Music*, pp. 78, 84.

117. Alvarenga, “Breves notas,” p. 208.

Module of the notation

The fragments show great variety in the size of the neumes. The smallest neumes can be found in the earliest fragments. Starting from the mid-thirteenth century we can observe a growth in size of the neumes and a more pronounced angularity of the pen stroke. We can classify the fragments in three broad categories according to the module of the notation: “small,” “medium,” and “large.” The presence of the special punctum is unrelated to the size of the neumes, as the special punctum can be found in any of the above-mentioned categories. Within the whole set of fragments, the smallest neumes are found in the fragment with Visigothic features in the script P-BRad *Pasta dos documentos visigóticos*, s. n.

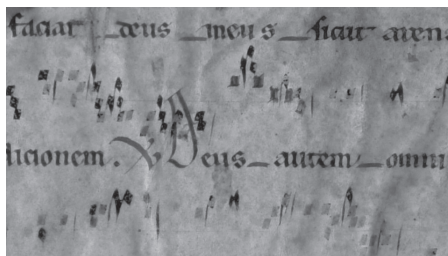


FIGURE 5 • P-G, 10-9-9-1, verso (detail), sample of medium size neumes

Other fragments representative of the “small” category are P-BRad, 52, group 1.1; P-BRam, N° 4 Códices, group 4.2 (see also Fig. 1). Medium-size neumes are found—*inter alias*—in P-BRad, 82, group 2.2; P-G, 10-9-9-1, group 4.1 (Fig. 5). Large-size neumes are found in P-BRad, 150, group 4.2; P-G, N 161, group 2.2 (see also Figs 2, 4). Neumes in the “large” group show a more pronounced distinction between hairlines and

bold strokes and, sometimes, the presence of musical bars. In the whole set of fragments, the largest group is that with medium size neumes.

Ductus

Aquitanian notation has a characteristic way of positioning the notes on the page: the neumes rise diagonally and fall vertically. In ascending melodic movements, like a *pes*, the axis of the notation is tilted to the right; in descending movements, like a *climacus*, the neumes are positioned vertically one above the other (reading from the top to the bottom). According to Rodríguez Suso, in the later fragments in Aquitanian notation from the Basque Country (which were coeval with the diffusion of square notation) the ductus of the notation changed, and in a descending melodic movement the puncta were no longer piled up one above the other but placed toward the right (with the axis becoming slanted to the right).¹¹⁸ None of the fragments in Braga and Guimarães show the same change in the ductus: in descending melodic movements the puncta within a neume are always vertically stacked one above the other (see the descending compound neumes in Figs 2, 4). The distinctive way of aligning descending notes on a slanted axis, along with the presence of the quilisma as the only semitone marker, may be considered

118. Rodríguez Suso, *La monodia litúrgica*, p. 488.

particular features of Aquitanian notation in the Basque Country. Furthermore, it may suggest that there was little contact between the scribes in the far north and the far west of the Peninsula. Indeed, the only affinity between the neumes in Aquitanian notation found in these two areas is the limited number of strategies for marking the semitone (respectively the quilisma and the special punctum), especially when compared to the broad variety found of signs employed in Aquitaine and Zamora (Table 2).

Custos

As can be seen in Appendix 2, the presence of the custos does not depend on the age of the source, as it can be found across all fragments. Furthermore, the presence of the custos does not depend on the diastematic readability of the notation, indeed, there are fragments belonging to groups 1. and 2. (= lozenge absent, or randomly used) where the custos is not employed. Likewise, there are chants whose notation is perfectly diastematic (groups 3. and 4.) where the custos is employed while being unnecessary. Thus, the absence of exact information on the semitone location did not automatically cause the scribe to compensate for melodic inaccuracy (and help the reader) by adding a custos.

It is interesting to note the shape of the custos, and whether it remains consistent within the same source. For instance, in P-BRad, 210 (group 2.2) the custodes occasionally take an irregular shape, which is not due to the presence of a second scribe but simply because the original notator did not take too much care in writing the custodes. Broadly speaking, there are two types of custodes found in Aquitanian notation. Those with the head on the right are mainly found in Southern French sources (Fig. 6), while custodes with the head on the left seem to be peculiar to the Iberian Peninsula, with the latter type becoming more common in the thirteenth and fourteenth centuries.¹¹⁹ In the liturgical fragments from the Basque Country, Rodríguez Suso identified 28 different custos shapes, with the tail usually on the right, but occasionally on the left.¹²⁰ The typical shape of the custos found in Braga and Guimarães is the Iberian one (with the head on the left); the head is normally placed at the bottom left (Fig. 4) but it can also be found at the top left (Fig. 2). Occasionally the custos has no head but only a vertical stem, like in P-BRad, 15 (group 2.2). In very few cases the custos has the head on the right (the typical French style), and those cases are found in some of the earlier

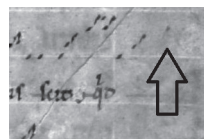


Figure 6 • P-BRad, 50, fol. Bv (detail of the French custos, see the arrow), © Universidade do Minho/Arquivo Distrital de Braga (document PT/UM-ADB/COL/F/000050)

119. Nelson, *Medieval Liturgical Music*, p. 85. Images of the three main forms of custodes in F-Pn, ms. lat. 903 can be seen in Cazaux-Kowalski, "Le graduel de Saint-Yrieix," p. 527.

120. Rodríguez Suso, *La monodia litúrgica*, p. 515–16.

fragments analysed here, all with dry-point line.¹²¹ It seems possible to explain the presence of custodes with the head to the right of the stem if we refer to the original Aquitanian models from which the notation was copied. Given the early dates of these fragments, we can assume that those models were probably manuscripts brought directly from Southern France. Later, local scribes developed a preference for a custos with the head on the left, and its use became more systematic.

Final remarks

Graphic changes in the notation due to the presence of new writing tools for Gothic script did not affect the application of the lozenged and the square punctum. Some characteristics of Aquitanian notation endured unchanged from the twelfth to the fifteenth centuries: the tendency for a smaller module for notated text than for prayers, the tendency to position the notes vertically one above the other in descending movements rather than on a slanted axis, the presence of one line for notation, and the use of the special punctum as the only strategy for providing information on the lower semitone. The analysis of the custos in relation to the special punctum clarifies that its presence was unrelated to the age of the source and the diastematic readability of the notation. The features that change over time are the module of the notation, which progressively became larger—and, consequently, changed the area for notation—and the head of the custos, which was turned to the left and became a distinctive Iberian feature.



The analysis of the notation in the plainchant fragments now in Braga and Guimarães demonstrates that no major differences can be found between these sources and the Aquitanian manuscripts, thus suggesting that the Visigothic scribes did not creatively rework elements of Aquitanian notation and instead it appears that they passively accepted the foreign model without changing any of its basic features. This palaeographical scrutiny and analysis of the contextual usage of the lozenged punctum distinguishes the cases where the lozenge was randomly written from the cases where it was purposefully employed to convey information on the diatonic semitone. Comparing early and later sources it becomes evident that in the early fragments the special punctum was used as a mnemonic and, as time passed and the Iberian scribes mastered the new

121. The head is placed at the top-right of the stem in the following fragments: P-BRad, 50, fol. Bv (Fig. 6); P-BRad, 51, fol. 157r; P-BRad, 52, fol. 131v Introit “Resurrexi” (Cantus ID g01007); P-BRad, 108, fol. 106v. In fragment P-BRad, 107, fol. Bv, the head is placed at the middle of the stem, on the right. The notation of these fragments is classified in group 1.1.

notation, the use of the special punctum became more and more systematic and widespread (starting from approximately the thirteenth century onward). Initially, the special punctum was used mostly in descending melodic movements within compound neumes, but when its use became more systematic, the special punctum was more frequently found isolated on a single syllable in both ascending and descending melodic movements within compound neumes.

Among the fragments examined here, 26 do not show the lozenged/tilted punctum in the notation; 29 fragments show the presence of the lozenged/tilted punctum but without conveying any semitonal information; and 48 fragments employ—more or less consistently—the special punctum.¹²² This investigation demonstrated that the special punctum was the preferred scribal device adopted to convey information on the semitone in the fragments now kept in Braga and Guimarães because no other graphical device (e.g. the quilisma or the semi-circular virga) was employed with the same purpose in these sources. However, the special punctum was not a universal strategy employed in all the descendants of Aquitanian notation in Portuguese territories, as Corbin had originally suggested. Indeed, while Aquitanian notation with semitone marking was available, only some scribes and scriptoria chose to employ it, and the majority of the fragments studied here do not use the special punctum at all.

This research shows the coexistence of two parallel systems for notating plainchant—both of which employ the typical elements of Aquitanian notation on a single line without clefs—from the late eleventh to the fifteenth century. One was a non-diastematic system lacking any indication of semitone positions. The other was a diastematic and heightened system which shows some strategies to convey information on the location of the semitone, and this system was already employed in the Iberian scriptoria in the aftermath of the imposition of the Franco-Roman rite. The coexistence of these two systems sheds some light on the culture of making and writing music represented by the fragments in this study. Whilst some music scribes showed great concern for the diastematic readability of the music even in the early days, others completely disregarded such information, therefore indicating that the transmission of music relied heavily on orality. Iberian scribes maintained the single-line system until the fifteenth century and did not replace the obsolete Aquitanian notation until almost the beginning of the modern era. These fragments indicate a conservative medieval Iberian world, where scribes and scriptoria were not exposed to technical innovations, did not benefit from mutual exchanges and communication, thus perpetuating old schemes and models of writing.

122. P-BRad, 13 and 85 have been counted twice because they are made up of two fragments from different origins.

APPENDIX 1: FRAGMENTS LISTED ACCORDING TO THEIR CURRENT LOCATION

P-BRad (40 fragments):

1 (caixa 243, n. 5); 2; 3; 4 (caixa 243, n. 9); 6; 8 (caixa 243, n. 4); 9 (caixa 238, n. 19); 11 (caixa 240, n. 11); 13 (caixa 250, n. 24); 15; 16 (caixa 240, n. 12); 23 (caixa 243, n. 15); 24 (caixa 246, n. 7); 25; 28 (caixa 288, n. 3); 46 (caixa 285, n. 9); 48; 50 (caixa 279, n. 9); 51; 52 (caixa 249, n. 14); 54 (caixa 315, n. 201); 77 (caixa 242, n. 3); 81 (caixa 245, n. 13); 82; 85 (caixa 250, n. 23); 90 (caixa 242, n. 2); 91 (caixa 284, n. 7); 92 (caixa 284, n. 6); 100; 107 (caixa 287, n. 5); 108 (caixa 279, n. 5); 150 (caixa 248, n. 18); 169; 172 (caixa 279, n. 11); 176 (caixa 240, n. 5); 206; 208; 210 (caixa 289, n. 6); 244; Pasta dos documentos visigóticos, s. n. (fragment now lost).

P-BRam (11 fragments)

Nº 1 Códices; Nº 2 Códices; Nº 3 Códices; Nº 4 Códices; Nº 5 Códices; Nº 8 Códices; Nº 9 Códices; Nº 10 Códices; Nº 12 Códices; Nº 13 Códices; Nº 14 Códices.

P-BRs (3 fragments)

Frag. 1; Frag. 3; Frag. 10.

P-G (46 fragments)

10-9-9-1; C 149; C 192; C 492; C 623; C 626; C 627; C 635; C 809; C 1152; C 1204; C 1206; C 1245; C 1339a; C 1369; C 1370; C 1372; C 1423; C 1426; C 1429; N 10; N 15; N 19; N 20; N 22; N 24; N 37; N 38; N 43; N 46; N 60; N 80; N 83; N 84; N 93; N 99; N 133; N 161; N 328; N 656; P 217; P 280; P 441; P 627; P 714; P 808.

P-Gsc (1 fragment)

225.

APPENDIX 2: OVERVIEW ON THE CHARACTERISTICS OF THE NOTATION
in the fragments now in Braga and Guimarães

The fragments are chronologically ordered in the shelf-mark column. Abbreviations used in the table: D = Dry point; R = Red; Y = Yes; S = Sometimes. An empty cell means either no or absence. The numerotation given in the column ID refers to the digit/s which should be inserted at the end of the following URL for a direct access to the digitalisation in the PEM database: <http://pemdatabase.eu/source/00000>. For example for P-Brad, Pasta dos documentos visigóticos, s. n.: <http://pemdatabase.eu/source/12692>.

Shelf-mark	ID	Century	Line	Clefs	Lozenged/ tilted punctum	Mi-significa- tion	Group (according to the characteristics of the notation)	Custos ¹²³	Repertory
P-BRad, Pasta dos documentos visigóticos, s. n.	12692	1090–1120					1.1		Mass
P-BRam, N° 12 Códices	43118	11th–12th	D		Y	S	3.1	Y	Office
P-BRad, 48	1669	12th	D				1.1	?	Mass
P-BRad, 50 (caixa 279, n. 9)	1673	12th	D				1.1	Y	Mass
P-BRad, 51	1676	12th	D				1.1	Y	Mass
P-BRad, 52 (caixa 249, n. 14)	1698	12th	D				1.1	Y	Mass
P-BRad, 107 (caixa 287, n. 5)	1691	12th	D				1.1	Y	Mass
P-BRad, 108 (caixa 279, n. 5)	1692	12th	D				1.1	Y	Mass

123. If the conditions of the fragment do not allow to check the presence of the custos, this is signaled in the table with a “?”.

P-BRad, 172 (caixa 279, n. 11)	1704	12th	D		1.1	S	Mass
P-BRad, 8 (caixa 243, n. 4)	1409	12th	D	Y	2.1		Mass
P-BRad, 206	1450	12th	D	Y	3.1	?	Mass
P-BRad, 90 (caixa 242, n. 2)	1441	12th	D		1.1	Y	Office
P-G, C 1369	42798	12th	D		1.1	Y	Office
P-G, C 1423	42855	12th	D		1.1	Y	Office
P-G, C 623	39351	12th	R		1.2	S	Mass
P-G, C 1204	39416	12th	R		1.2	Y	Mass
P-BRad, 15	1489	12th	R	Y	2.2	Y	Mass
P-BRad, 16 (caixa 240, n. 12)	1498	12th	R	Y	2.2	Y	Mass
P-BRad, 208	1708	12th	R	Y	2.2	?	Mass
P-BRam, N° 1 Códices	39585	12th	R	Y	2.2	Y	Mass
P-BRam, N° 2 Códices	39330	12th	R	Y	2.2		Mass
P-G, N 46	4792	12th-13th	D	Y	2.1	S	Mass
P-BRad, 85 fols. A, B	1438	12th-13th	D	Y	2.1	Y	Office
P-BRad, 1 (caixa 243, n. 5)	213	12th-13th	R	Y	2.2	Y	Mass
P-G, C 1370	4791	12th-13th	R		1.2	Y	Mass
P-G, P 441	39790	12th-13th	R	Y	2.2	Y	Mass
P-G, C 626	39399	12th-13th	R		1.2	S	Mass
P-Gsc, 225	6040	12th-13th	R	Y	4.2	Y	Mass
P-BRad, 2	240	12th-13th	R	Y	3.2	Y	Mass
P-BRad, 92 (caixa 284, n. 6)	1447	12th-13th	R	Y	3.2	Y	Mass

P-BRad, 100	1686	12th–13th	R	Y	S	3.2	Mass
P-BRad, 210 (caixa 289, n. 6)	1453	12th–13th	R	Y		2.2	Mass
P-BRad, 28 (caixa 288, n. 3)	319	12th–13th	R	Y		2.2	Mass
P-BRad, 82	1429	12th–13th	R	Y		2.2	Mass
P-BRad, 85 (caixa 250, n. 23) folio C ¹²⁴	1438	12th–13th	R			1.2	Office
P-BRam, N° 8 Códices	42886	12th–13th	R			1.2	Office
P-BRam, N° 10 Códices	42923	12th–13th	R			1.2	Office
P-G, C 1426	27481	12th–13th	R	Y	Y	4.2	Office
P-BRad, 91 (caixa 284, n. 7)	1444	12th–13th	R	Y		2.2	Office
P-BRam, N° 5 Códices	42975	12th–13th	R	Y		2.2	Office
P-G, P 627	43084	12th–13th	R	Y		2.2	Office
P-BRad, 244	1467	12th–13th	R	Y	S	3.2	Office
P-BRam, N° 13 Códices	43619	12th–13th	R	Y	S	3.2	Office
P-BRad, 13 (caixa 250, n. 24) folio B ¹²⁵	186	13th, 1/2	R			1.2	Mass
P-BRad, 24 (caixa 246, n. 7)	182	13th, 1/2	R			1.2	Mass
P-BRad, 54 (caixa 315, n. 201)	1699	13th, 1/2	R	Y	S	3.2	Mass
P-G, C 635	39836	13th, 1/2	R	Y	S	3.2	Mass

124. P-BRad, 85 (caixa 250, n. 23) has folio C catalogued in group 1.2 and fols A-B catalogued in group 2.1.

125. P-BRad, 13 (caixa 250, n. 24) is made up of two folios originally from a Mass and the other from an Office codex. Fol. A is catalogued in group 2.2.

P-BRad, 13 (caixa 250, n. 24) folio A	186	13th, 1/2	R	Y	2.2	S	Office
P-BRad, 81 (caixa 245, n. 13)	1426	13th, 1/2	R	Y	2.2	Y	Office
P-G, C 809	39933	13th	D	Y	4.1	?	Mass
P-G, 10-9-9-1	1990	13th	D	Y	4.1		Office
P-BRad, 6	1406	13th	R	Y	3.2	?	Mass, Office
P-BRad, 46 (caixa 285, n. 9)	1666	13th	R		1.2		Mass
P-G, N 15	1974	13th	R		1.2	?	Mass
P-G, N 38	39445	13th	R		1.2	Y	Mass
P-G, P 808	39546	13th	R		1.2	Y	Mass
P-G, N 83	43828	13th	R	Y	2.2	?	Mass
P-G, N 93	39483	13th	R	Y	2.2	Y	Mass
P-BRad, 9 (caixa 238, n. 19)	349	13th	R	Y	3.2	Y	Mass
P-BRad, 23 (caixa 243, n. 15)	1685	13th	R	Y	3.2	Y	Mass
P-BRam, N° 3 Códices	43666	13th	R	Y	4.2		Mass
P-G, C 149	4787	13th	R	Y	4.2		Mass
P-BRad, 25 ¹²⁶	1697	13th	R		1.2	?	Office
P-G, N 328	42930	13th	R		1.2	Y	Office
P-G, C 1152	4690	13th	R	Y	3.2	Y	Office
P-G, N 99	43315	13th	R	Y	3.2	Y	Office
P-G, N 43	43231	13th	R	Y	3.2	Y	Office
P-BRad, 4 (caixa 243, n. 9)	318	13th	R	Y	4.2	S	Office

P-BRam, N° 4 Códices	43358	13th	R	Y	Y	4.2	Y	Office
P-BRam, N° 9 Códices	43372	13th	R	Y	Y	4.2	Y	Office
P-G, C 492	2024	13th	R	Y	Y	4.2	Y	Office
P-G, N 19	43436	13th	R	Y	Y	4.2	Y	Office
P-G, N 84	43543	13th	R	Y	Y	4.2	?	Office
P-G, N 22	43442	13th	R	Y	Y	4.2	Y	Office
P-BRad, 169	185	13th, 2/2	R	Y	S	3.2	Y	Mass
P-G, N 656	43752	13th, 2/2	R	Y	Y	4.2	?	Mass
P-G, N 80	43278	13th, 2/2	R	Y	S	3.2	?	Office
P-BRad, 77 (caixa 242, n. 3)	5	13th, 2/2	R	Y	S	3.2	Y	Office
P-G, N 60	29244	13th, 2/2	R	Y	Y	4.2	Y	Office
P-G, C 1206	4790	13th–14th	R	Y	Y	4.2	Y	Mass
P-BRad, 11 (caixa 240, n. 11)	1474	13th–14th	R	Y	Y	4.2	Y	Mass
P-G, C 1245	2039	13th–14th	R	Y	S	3.2	Y	Mass
P-G, C 1339a	39614	14th	R	Y	S	3.2	Y	Mass
P-G, P 280	43788	14th	R	Y	Y	4.2	Y	Mass
P-BRad, 150 (caixa 248, n. 18)	1700	14th	R	Y	Y	4.2		Mass
P-BRad, 3	1403	14th	R	Y	Y	4.2	Y	Mass
P-G, C 627	4788	14th	R	Y	S	3.2	Y	Mass

126. In this case the line for notation is not red but brown. Notation was added later and highlighted the dry-point lines underneath with the same brown ink used to write the textual/musical additions.

P-BRam, N° 14 Códices	43721	14th	R	Y	Y	4.2	Mass
P-G, P 217	80294	14th	R	Y		2.2	Office
P-G, N 20	43134	14th	R	Y	Y	4.2	Office
P-G, N 37	43449	14th	R	Y	Y	4.2	Office
P-G, P 714	43577	14th	R	Y	Y	4.2	Office
P-G, N 10	28696	14th	R	Y	Y	4.2	Office
P-G, N 24	43179	14th, 2/2	R	Y	S	3.2	Office
P-BRad, 176 (caixa 240, n. 5)	1705	15th	R	Y	Y	4.2	Mass
P-G, C 192	2021	15th	R	Y	Y	4.2	Office
P-BRs, Frag. 1	42984	15th	R	Y		2.2	Office
P-BRs, Frag. 3	43000	15th	R	Y		2.2	Office
P-BRs, Frag. 10	43015	15th	R	Y		2.2	Office
P-G, C 1372	43025	15th	R	Y		2.2	Office
P-G, C 1429	43041	15th	R	Y		2.2	Office
P-G, N 133	43046	15th	R	Y		2.2	Office
P-G, N 161	43061	15th	R	Y		2.2	Office

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RÉSUMÉ Solange Corbin fut la première chercheuse à considérer le *punctum* losangé, utilisé pour indiquer un demi-ton (« *punctum* spécial »), comme une des principales caractéristiques de la « notation portugaise », elle-même issue de la notation aquitaine. Même si les découvertes de Corbin furent par la suite partiellement révisées, le *punctum* spécial est toujours considéré comme une particularité graphique que l'on rencontre spécialement dans les manuscrits portugais. La présente étude paléographique concerne l'usage du *punctum* spécial dans 104 fragments en notation aquitaine conservés dans les archives de Braga et Guimarães. Ces fragments datent du XII^e jusqu'au XV^e siècle et nous permettent d'appréhender les changements apparus dans le dessin de la notation aquitaine. Cette recherche montre que le *punctum* spécial était le système préféré des scribes pour indiquer le demi-ton dans les fragments même s'il n'était pas employé systématiquement. À travers les siècles, le Portugal fut en effet témoin de la coexistence de deux systèmes parallèles de notation du plain-chant, tous deux employant des éléments propres à la notation aquitaine sur une seule ligne sans clé. Le premier faisait usage du *punctum* spécial, alors que le second, adiastrématique, ne contenait pas de signe pour indiquer le demi-ton.

ABSTRACT Solange Corbin was the first scholar to regard the lozenge *punctum* employed as *mi-sign* (“special *punctum*”) as the main characteristic of a “Portuguese notation” derived from Aquitanian notation. Even though Corbin’s findings were later partially revised, the special *punctum* is still regarded as a graphical feature mostly peculiar to Portuguese manuscripts. This palaeographical study investigates the use of the special *punctum* and the changes that occurred to Aquitanian notation in 104 fragments dated from the twelfth to the fifteenth centuries in the archives of Braga and Guimarães. This research demonstrates that the special *punctum* was the preferred scribal device employed to convey semitonal information, but that it was not systematically employed. Over the course of four centuries Portugal witnessed the coexistence of two parallel systems for notating plainchant. While both systems employed the typical elements of Aquitanian notation on a single line without clefs, one was perfectly diastematic while the other conveyed no indications of semitones.

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